

THE AMERICAN ELEVATOR AND GRAIN TRADE

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One Dollar Per Annum
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VOL. XLIII

431 South Dearborn Street, Chicago, Ill., December 15, 1924

NO. 6

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Don't be satisfied with slow returns or poor service; send your shipments to

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Furnish Plans, Estimates and Build
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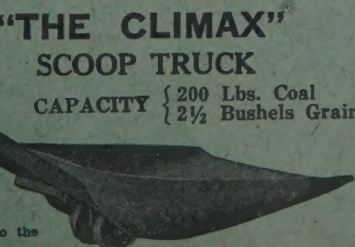
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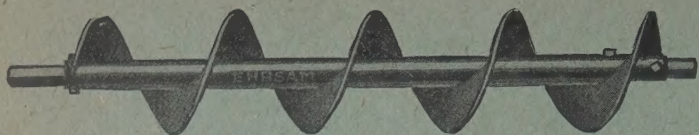
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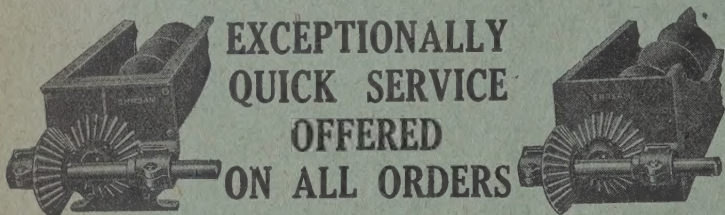
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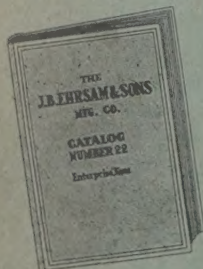


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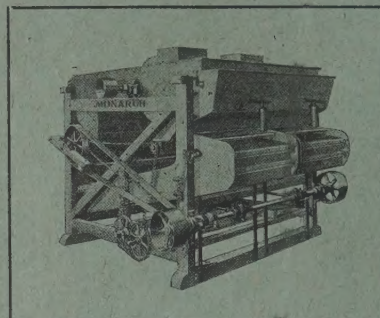
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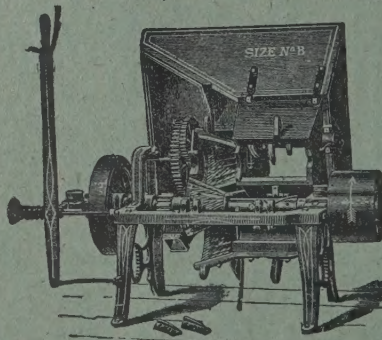
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Crush and Grind ear corn, husked or unhusked, alone or mixed with any kind of small grain in any desired proportion. Reduce the material to any fineness desired for feeding purposes.

11 Sizes, 2 to 25 H.P.

Sold with or without Sacking Elevator.

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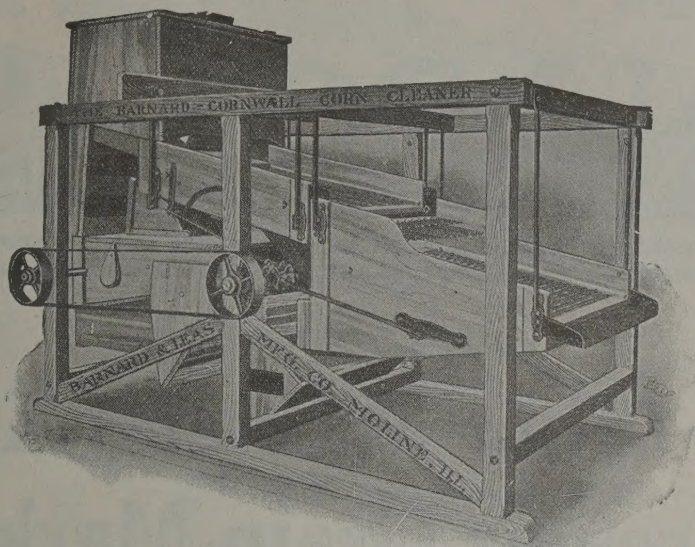
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CLEANER

Cleans Corn Thoroughly Without Clogging

Patented Finger Sieves remove, without clogging all cobs, small cob ends, pieces of cob and husks.

Strong air currents remove chaff, silks, shrunken grains, light broken pieces of corn and all light impurities, leaving the corn perfectly clean.

Shaker can be constructed, if desired, with a cockle or sand sieve for removing mustard and other small seeds, sand, etc.

Sieves for handling small grain can be placed on the shaker without removing the corn sieves.

Screenings saved for feed.

Is dustless, light-running and durable.

Made in six different sizes with capacities ranging from 175 to 2000 bushels of corn per hour.

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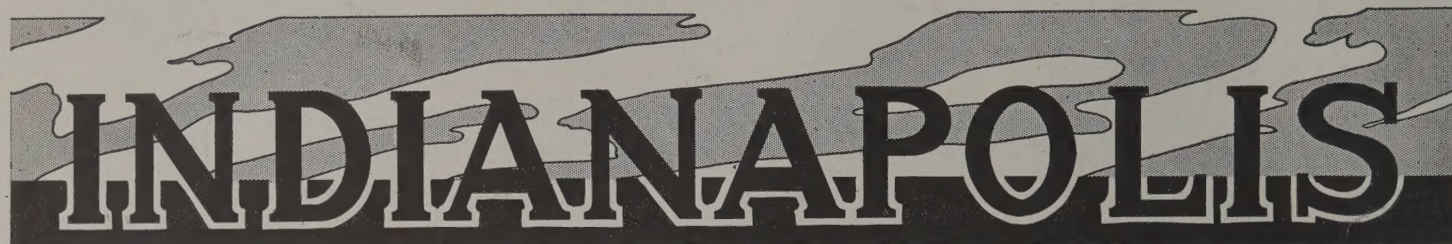


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Indianapolis—Your Market—A Three Times Greater Grain Market

Indianapolis, the center of grain centers, is known today as one of the most important, rapidly growing grain and hay markets in the country. Receipts of grain during the last ten years have nearly trebled in volume, due to the advantages its geographical location offers to the grain and hay producing and consuming sections of the country, its splendid railroad facilities assuring prompt returns on shipments, its large local consumption of grain by its corn and flour mills and its manufacturing industries, its increased elevator storage and drying equipment, its adequate weighing facilities and efficient inspection department. This has made Indianapolis more and more important each season for shippers and buyers of grain, hay and feed.

Movement of Grain and Hay During the Year 1923

	Receipts	Shipments
Corn	17,975,000 bushels	12,524,000 bushels
Oats	12,080,000 bushels	10,670,000 bushels
Wheat	6,131,000 bushels	3,927,000 bushels
Rye	383,000 bushels	331,000 bushels

The following Receivers and Shippers are members of
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Bert A. Boyd Grain Co.

The Indianapolis Commission House
"Consignments Our Hobby"

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The Cleveland Grain Co.

OPERATING FIVE TERMINAL ELEVATORS
Mighty Good Consignment Service
Ed. K. Shepperd, Manager

The Bingham Grain Company

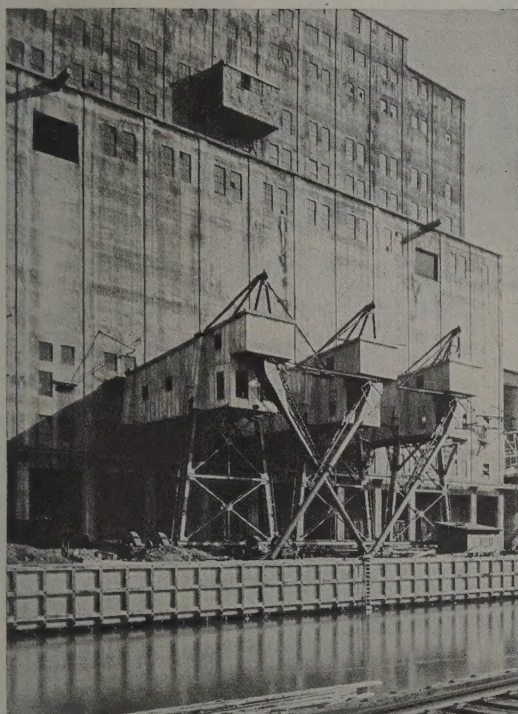
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GRAIN, STOCKS AND PROVISIONS
Members of New York Stock Exchange, Chicago Board
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The Better Kind of Grain Handling Machinery

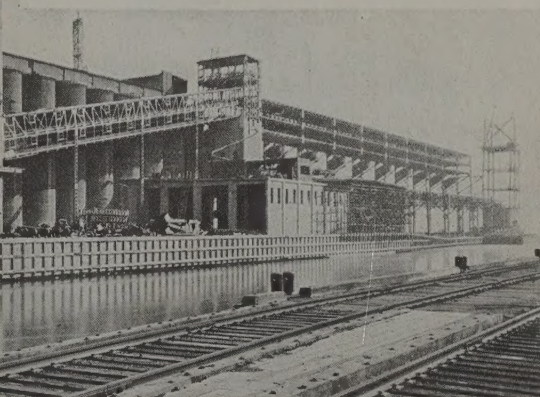


PENNSYLVANIA RAILROAD ELEVATOR, BALTIMORE, MD.

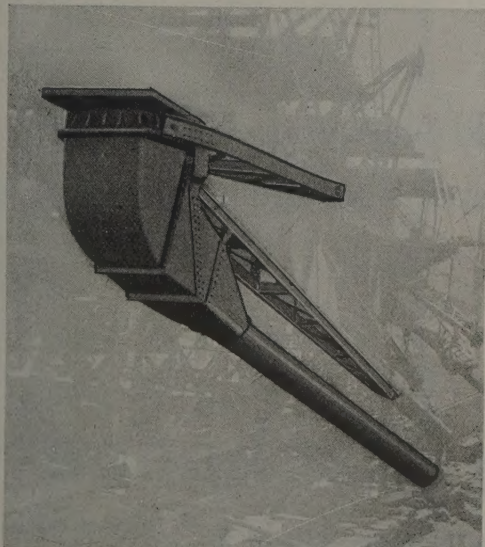
Weller made products are sold on the basis of quality. Installed in your elevator they will help you to operate at full capacity at the lowest cost for upkeep. Frequent shutdowns and waiting for repairs dissipate your profits so why not specify

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Made by men who know its application and the conditions under which it is to operate. It proves its merit because quality is built into it.



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Belt Conveyors	Loading Spouts
Drag Conveyors	Dock Spouts
Pan Conveyors	Chain
Mixing Conveyors	Sprockets
Spiral Conveyors	Grain Cleaners
Trippers	Grain Driers
Bucket Elevators	Truck Dumps
Elevator Buckets	Wagon Dumps
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THE GATEWAY TO THE SOUTH AND EAST

Has the "square deal" plugging system for hay.

Has reconsignment and transit privileges and other favorable points which insures most successful handling of grain or hay shipments.



Home of the Cincinnati Grain and Hay Exchange

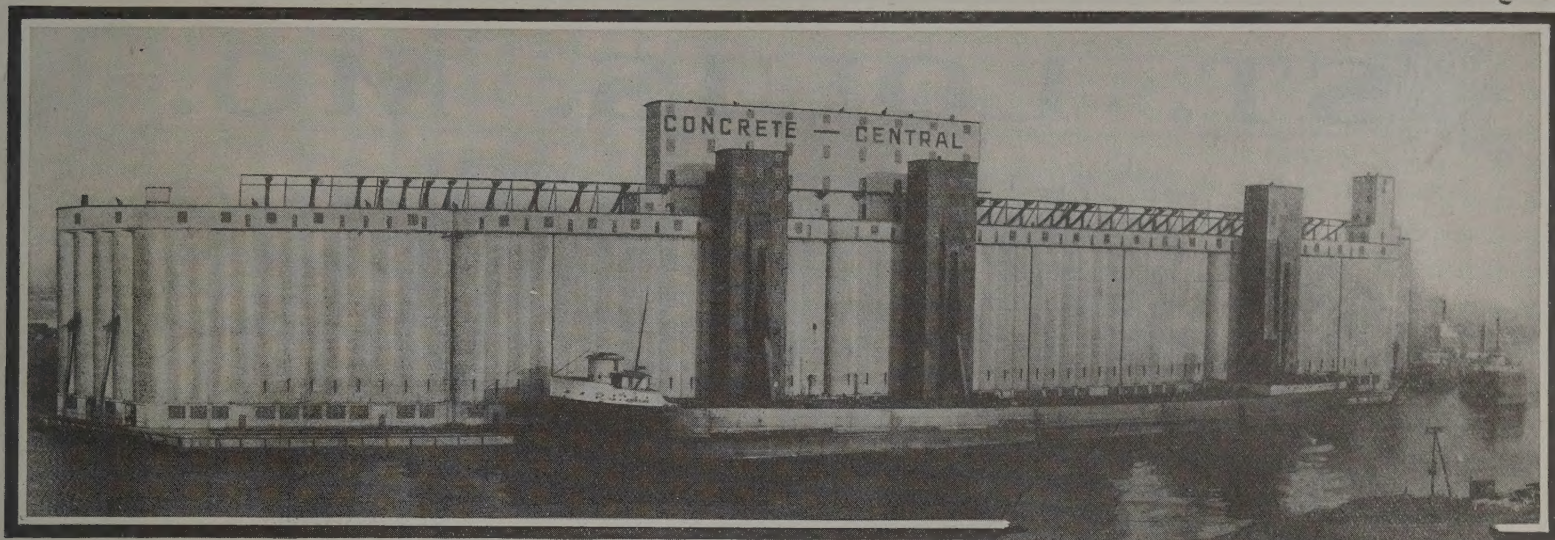
Is the terminal point for 200,000 miles of railways and therefore a convenient shipping point for the country dealer, and local buyers are enabled to distribute all products quickly and to best advantage. Has weighing and inspection service second to none and up-to-date grain and hay merchants constantly safeguarding their patrons' interests.

Those are just a few of the reasons why you should ship your Grain and Hay to Cincinnati. Ship to any of the following responsible grain and hay firms, all members of the

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Concrete Central Elevator, Buffalo, N. Y., one of the many Buffalo terminal elevators equipped with Webster grain handling machinery.

BUFFALO COURIER, FRIDAY

LAKE GRAIN TRADE LIVELY THESE DAYS

Buffalo Elevators Are Operating Almost at Top Speed.

The lake grain fleet is traveling at a goodly clip these days and as a result the Buffalo elevators are operating at almost top speed. For the first fifteen days of October the fleet delivered at this port 22,500,000 bushels, and up to yesterday morning the receipts at the local elevators totaled 155,000,000 bushels, an immense increase over last season.

The vessels at the elevators here yesterday had on approximately 2,000,000 bushels and on the preceding day the elevators unloaded 2,120,000 bushels.

This elevators are reported in good shape to keep up the good work, and cars were never in better supply. The Barge canal is handling a fair share of the grain eastbound, and the export movement is reported good.

"The car supply was never better," said an elevator man yesterday. "They are simply throwing cars at us these days. Indications point to heavy movement of grain down the lakes as long as long as the boats can navigate."

There is another big grain-laden fleet on the way here, and it looks now as if there will be a good-sized lineup at the elevators right through the season, marine men say.

The package freighters are keeping fairly busy these days, both eastbound and westbound traffic having been increasing of late. The Utica and Corners of the G. L. T. C. fleet are the only boats not in commission at present.

Marquette: W. H. Wolf, Ashland; John Progress, Detroit, light.

Machinery for Rapid Handling of Grain

ONE of the big problems confronting grain elevator operators is their need for efficient disposal or transfer of grain. Whether it be loading, unloading, or transferring from bin to bin, to avoid spillage, the move must be made with speed, and that is where Webster Equipment is most valuable.

Dependability is noticeable wherever one finds Webster Equipment. The operator knows just what can be done in a given period of time and he depends upon the equipment to make good his word.

For nearly half a century the Webster name has been a synonym for Dependable Grain Handling Machinery. Modern terminal elevators all over the country testify to Webster's engineering ability.

Whether your requirements are for handling grain, flour, cereal, or feed, the Webster line stands ready to offer you the best.

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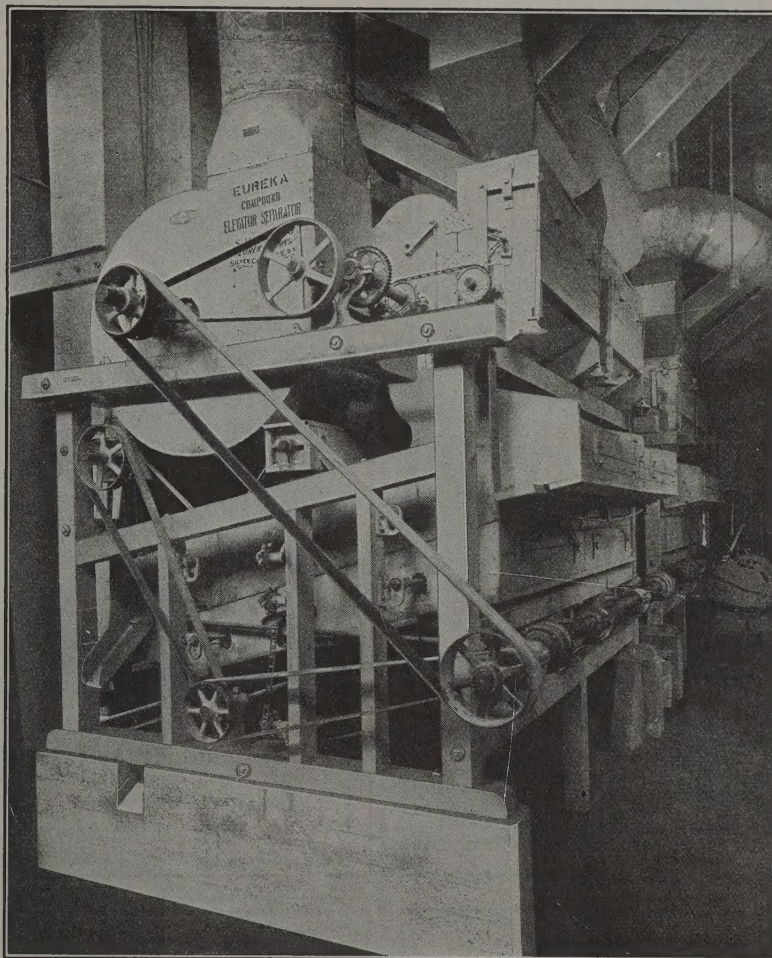
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Marine Legs Dock Spouts
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Belt Conveyors and Trippers
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NORFOLK MUNICIPAL ELEVATOR,
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to be the world's fastest-working house, is a battery of
"EUREKA" SEPARATORS

The machines are raising export wheat two grades.

Embodied in these Cleaners are all the latest features, including
Ball-bearing Eccentrics and Ball Bearings

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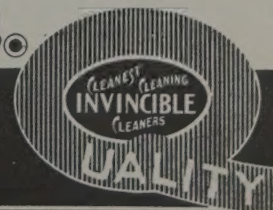
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MACDONALD ENGINEERING COMPANY

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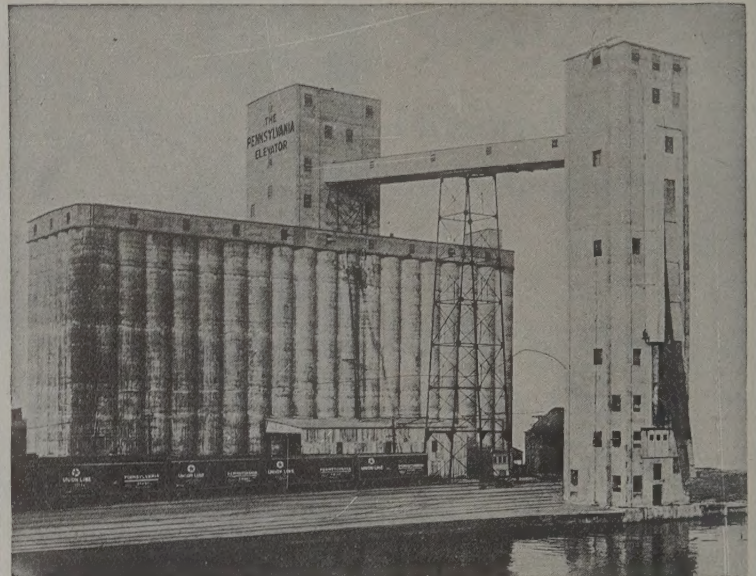
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The Dowdall Grain Separators and Dust Removers

Keeps elevator pit and cupola free from dust and even makes it possible to shovel grain in a car without a dust mask. Improves the condition of damp or dirty grain, lowers the risk of fire, and eliminates the explosion hazard.

Equally efficient in country elevator or large terminal house.

Write for circular describing the system and the list of satisfied grain firms who are using it.

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THE POLK SYSTEM

All-steel machines for all kinds of
CIRCULAR CONCRETE CONSTRUCTION

We contract grain storages, water
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Indiana

The "Knickerbocker Cyclone" Dust Collector



For Grain Cleaners

ALL STEEL

Write for Catalog

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Condensed Statement, June 30, 1924

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Acceptances & Call Loans secured by	
Acceptances	8,233,209.99
U. S. Government Securities.....	14,360,955.13
Other Securities and Advances.....	20,941,728.80
Customers' Liability a/c Acceptances and	
Letters of Credit.....	31,907,947.96
	<u>\$79,499,385.19</u>

LIABILITIES

Subscribed Capital & Surplus	\$15,250,000.00
Capital Paid In	\$10,250,000.00
Undivided Profits and Reserves.....	2,303,837.26
Due Banks and Customers.....	33,814,758.66
Acceptances and Letters of Credit Out-	
standing	33,130,789.27
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ARE YOU WORRIED

about the condition of that grain in your bins?

Let us equip your storage with a

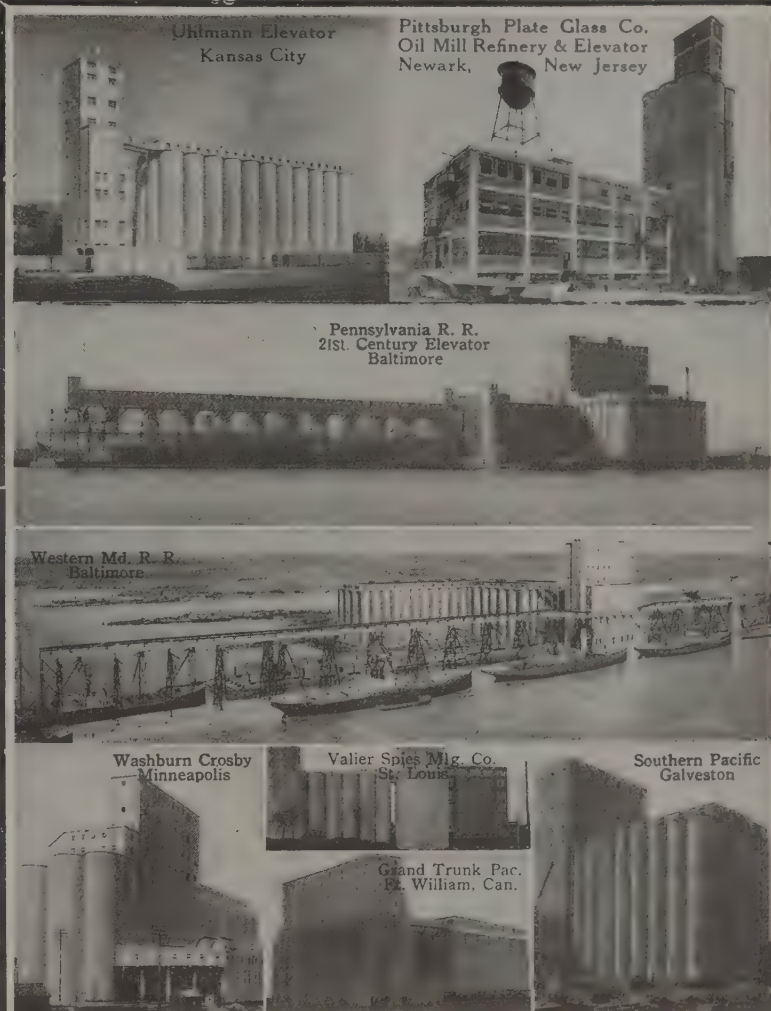
Zeleny Thermometer System

to tell you the exact condition of
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Over 100 Elevators Equipped

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But will be glad to mail you
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THE BEST
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Manchester Ship Canal Elevator
Manchester, England
Capacity 1,500,000 Bushels
Completed 1914



Buenos Aires Elevator Co.
Buenos Aires, Argentina
Capacity 750,000 Bushels
Completed 1920



John S. Metcalf Co. Grain Elevator Engineers



Chicago & North Western Railway Elevator
South Chicago, Illinois
Capacity 10,000,000 Bushels
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Melbourne, Australia, - - - 395 Collins Street
Vancouver, B. C., - - - 837 W. Hastings St.



Harbour Commissioners Elevator No. 2
Montreal, Quebec
Capacity 2,600,000 Bushels
Completed 1912



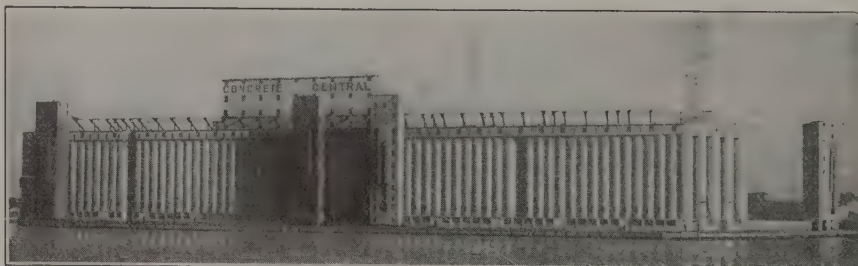
Sydney Terminal Elevator
Sydney, Australia
Capacity 6,400,000 Bushels
Completed 1921



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Built Elevators
Assure You
Economical Design
First Class Work
Efficient Operation
and
Satisfaction
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One of the Modern Houses Which Has Made a Record
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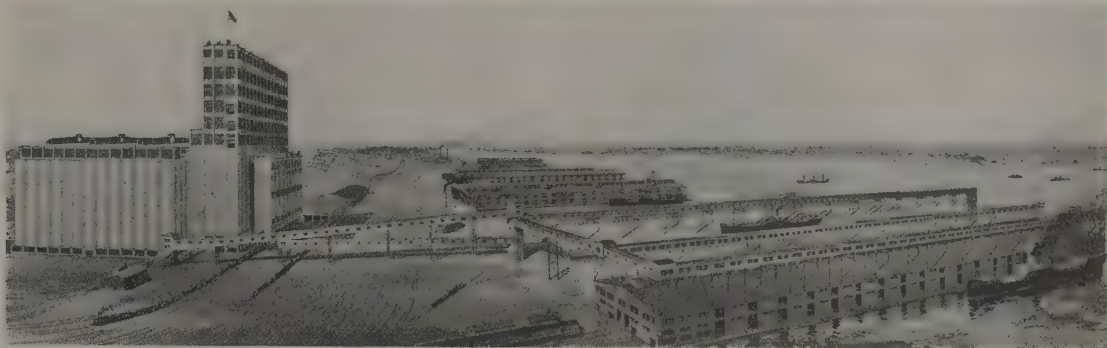
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Fort William, Ontario

Baltimore & Ohio Terminal Elevator, Baltimore, Md.

Now Under Construction
Capacity 3,800,000 Bushels

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Engineers*

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Transmit power from $\frac{1}{4}$ to 5,000 H.P.
with positive speed ratio, 98.6% constant
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distance between sprocket centers, occasional lubrication, long
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Consult the Morse Engineer in your territory

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Corn Sheller
be sure it's a
Triumph.

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states ten reasons why you
should have a TRIUMPH.

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Cleveland, Ohio

WHY-A-LEAK —STOP IT— BAD ORDER CARS

cause the loss of many hard earned
dollars to shippers of grain and seed.
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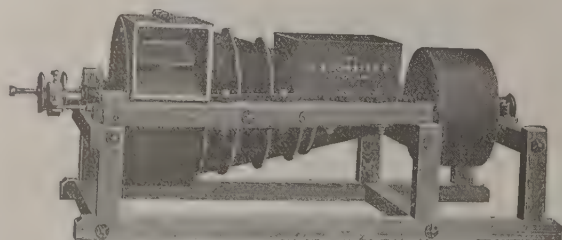
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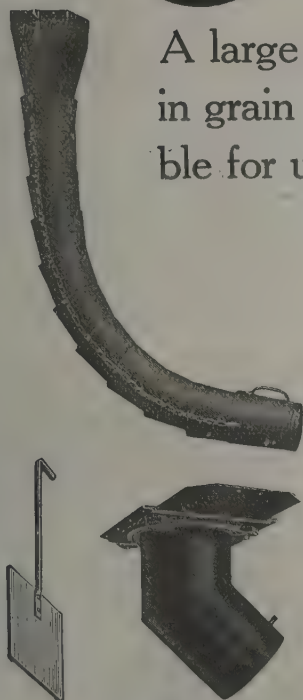
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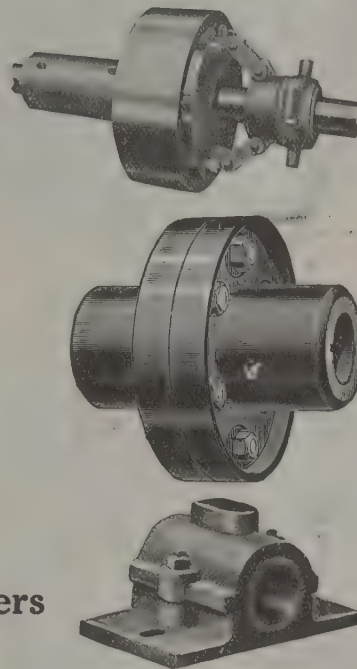
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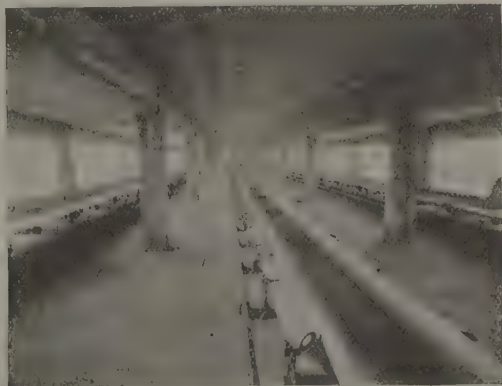
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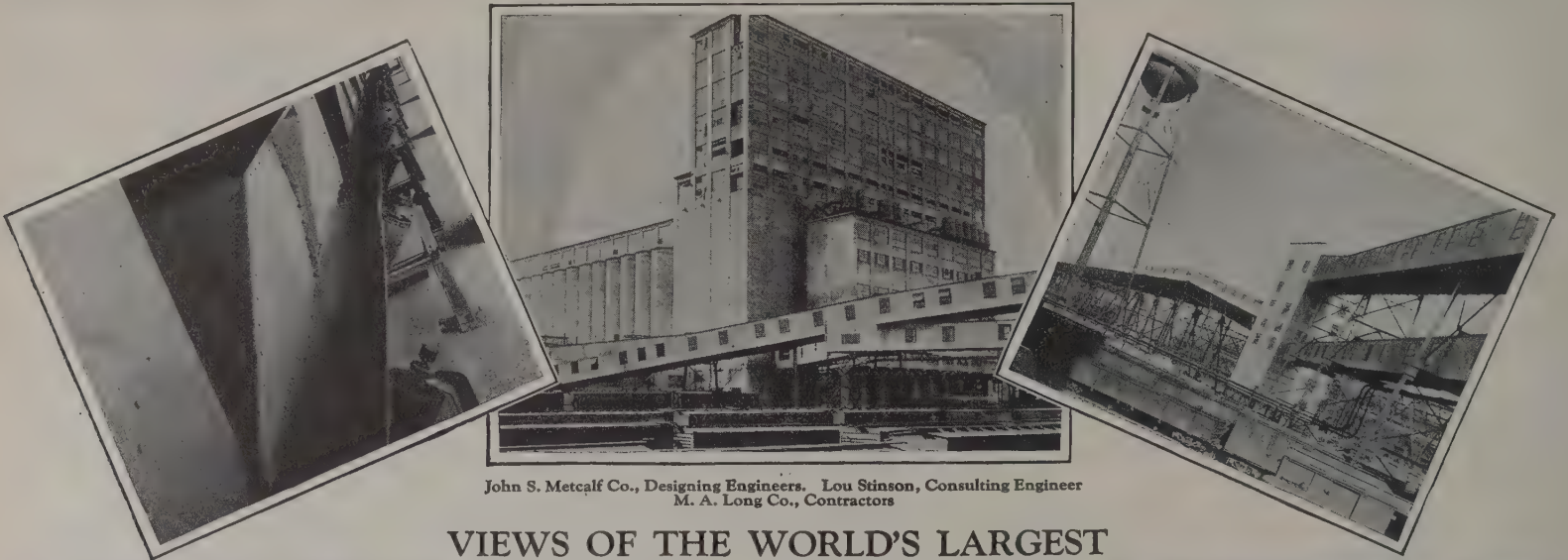
TWO VIEWS IN THE NEW ELEVATOR OF THE FORT WORTH ELEVATORS COMPANY, WHERE 7,500 FEET OF GRAIN CONVEYOR BELTING IS INSTALLED, MADE BY THE NEW YORK BELTING AND PACKING COMPANY.



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Per A. T. Ward

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CHICAGO, ILLINOIS, DECEMBER 15, 1924

NO. 6

New Elevator Swells Fort Worth's Capacity

Plant Operated by the Fort Worth Elevators Company Is An Important Unit in the Movement of Southwestern Grain Into Export Channels

A DECIDED increase in the quantity of grain handled at Fort Worth, Texas, has caused an added force to be instituted for grading cars at that point, and has also been the direct cause of larger storage facilities being introduced. The inspection force has been more than doubled, and the Government report is that during the 11-month period just completed an increase of 12,911 cars of all kinds of grain was handled.

In November 870 cars of wheat were received and 402 cars shipped out. The corresponding month in 1923, 382 cars were received and 174 shipped out. Sorghum grains make up a big part of the business on the Fort Worth floor, though the business is fairly well diversified in that all kinds of grain are handled in large quantities. The facilities available at this point for handling and storing grain have an aggregate capacity of approximately 10,000,000 bushels. The plants are well equipped, and with the added grain coming in during the last year, the plants are running pretty well up to capacity constantly.

The latest acquisition to the Fort Worth storage is a reinforced concrete elevator built by the Southwestern Engineering Company, Springfield, Mo., for the Fort Worth Elevators Company who commenced operating the elevator as a Federal licensed public unit on July 10, 1924, and the crying need for its space may be judged from the fact that it was filled on September 1. It is located on the right of way of the M. K. & T. Railroad, and is served by two unloading trucks, each of which is over a half mile in length, and one loading out track of very nearly the same length.

The total storage capacity is 1,650,000 bushels; and this is provided by 102 bins which hold an aggregate of 1,500,000 plus the head house capacity of 150,000 bushels. The receiving capacity is 60 cars, and shipping capacity 40 cars. Four cars can be unloaded at one time and two cars loaded out at the same time. Under the tracks, in the pit, there is a three-drum Weller Car Puller, one drum serving each track. This is driven by a 50-horsepower slip ring motor, with drum type controls located between the tracks so that the movement of the cars is in plain view of the operator at all times.

Four double power shovels are in use, located in the receiving pits, and each pair is driven by a

15-horsepower motor, connected with the shovels with Morse Silent Chain Drives and spur gears. The shovels were furnished by the Weller Manufacturing Company. Each of the receiving pits has a capacity of 1,500 bushels, with interlocking discharge gates operated from the working floor. Each pair of unloading pits is connected to the receiving elevators by means of 36-inch belt conveyors, and these latter also have Morse Silent Chain transmission, in conjunction with two 10-horsepower motors.

Three turning and shipping legs and one leg for receiving separators are provided. The six stands of elevators in the headhouse are equipped with 26-inch six-ply belt, with a double row of 12 by 8

the receiving garners, these vents having flexible connections to prevent interference with the correct weighing of the scale.

Under the hopper scales are located four 16-inch telescope trolley spouts, which connect to three 36-inch belt conveyors extending over the storage tanks and two loading out spouts; also four 16-inch telescope trolley spouts for by-passing around the garners and scales. The machinery includes also a 1,500-bushel capacity Eureka Oat Clipper with a 75-horsepower motor and Morse Silent Chain Drive to two largest size Carter Disc Separators for wheat and oats and two Carter Disc Separators for seed. Each pair of these machines is driven by a 7½-horsepower motor.

Bins are located above and below the oat clipper and Carter machines so that they can be operated without running any of the elevators. The Eureka separators are of armored construction and have SKF Ball Bearings for fan and eccentric shafts. The screens on the machines are automatically cleaned by the traveling brush of special type made by the S. Howes Company. These separators are two in number, each of 5,000 bushels' capacity, and they are located on the working floor, each driven by a 15-horsepower motor with Morse Silent Chain Drives.

In the basement is located a complete dust-collecting system with suction spouts of special design connected to all elevator boots and discharges of belt conveyors. Separate switch control for all departments is provided by a switchboard on this floor. Between the elevator head floor and the basement there is operated a Humphreys Employees' Elevator, which is run by a five-horse-

power motor. In the same areaway there is a structural steel stairway.

The sidewalls of the belt gallery over the tanks are made up entirely of Fenestra steel sash, with one-quarter inch ribbed wire glass, making this belt gallery very light and at the same time offering very slight resistance to any force from a dust explosion. Another feature of interest in this belt gallery is the fact that all covers for inlet openings into the tanks and bins are automatic closing. When grain is spouted into the bins the covers are held in an open position by the spout on the tripper and when the tripper is moved the cover closes automatically. This feature also eliminates



NEW FORT WORTH, TEXAS, PLANT OF THE FORT WORTH ELEVATORS COMPANY

inch high speed cups, 10 inches center to center. Each of the six elevators is driven by a 75-horsepower motor, and these motors are connected to countershafts with Morse Silent Chain Drives. The connection between the countershaft and the elevator head is by roller chain drive, each of the headshafts having 36-inch backstops.

The headhouse is equipped with four 2,000-bushel hopper scales, with recording beams, 30-inch discharge valves, and 2,500-bushel garners over each scale. All receiving garners over the hopper scales are vented through the roof of the headhouse with galvanized steel ducts of 12 inches diameter. Vents from the hopper scales are connected to the top of

the danger of having men fall into these openings when loose covers, which are ordinarily used, are out of place, which often is the case with the ordinary manhole or spout inlet cover. These automatic closing covers reduce the dust hazard.

For ventilation of the tunnels under the tanks, openings are provided in all the longitudinal walls in line with openings in the outside walls, and these openings are covered with wire mesh grills in steel frames. This design has been used for a number of years and the engineers state that the grill is preferred to a steel sash, as it not only provides better ventilation for the belt conveyor tunnels, but prevents damage in case of explosion.

Power is furnished by the Fort Worth Power & Light Company, and altogether there are 22 motors in the elevator.

Some idea of the growth of the enterprise may be gained by briefly reviewing the history of the Fort Worth Elevators Company. It commenced operations June 16, 1911, with a paid in capital of \$150,000. It now has a paid in capital of \$1,500,000 and a surplus of \$500,000. It handles in this plant a total of about 10,000,000 bushels per year. All grains are handled.

The equipment already described, belonging to the new plant, includes a storage annex which has 36 tanks in three rows, each tank 23 feet in diameter, surmounted by a belt gallery 40 feet wide containing the belts, 322 feet center to center. The tank structure is 286 feet long and 100 feet high. The numerous working house bins are rectangular, all nine feet wide, and most of them square. The head-house is 42 feet by 72 feet, and 192 feet high. The

was as high as 34½ per cent of the crop, although the usual percentage is 7, and the corn that was in the milk stage or earlier was about 18 per cent of the crop as compared with a usual percentage of 2. Percentage of the crop of mature, by states, is as follows: Missouri 72 per cent; Kentucky 69 per cent; Nebraska 66 per cent; Illinois 58 per cent. The other states are below 50 per cent and some of them much lower. Only 14 per cent of the crop matured in Wisconsin, which is partly in the corn belt; North Dakota 24 per cent; Minnesota 29 per cent, and South Dakota 31 per cent. The percentage of maturity in Iowa was 32 per cent, as compared with usual maturity of about 88 per cent.

A NEW FUMIGANT FOR GRAIN WEEVILS

A new fumigant, which is non-inflammable and non-explosive but effective for the destruction of weevils in wheat in grain cars, has been discovered by specialists of the Bureau of Chemistry, collaborating with the Bureaus of Entomology and Agricultural Economics, of the United States Department of Agriculture. This new fumigant leaves no objectionable odor in the flour or other products made from the grain. It consists of a mixture of 4 volumes of ethyl acetate with 6 volumes of carbon tetrachloride.

The new fumigant was discovered as the result of an extensive research to find something to take the place of the highly inflammable and explosive carbon disulphide which was used extensively for fumigating grain, but the use of which

of Chemistry, United States Department of Agriculture.

Further experiments are contemplated to determine the suitability and dosage of this mixture for fumigating elevators, flour mills, etc., and for fumigating human habitations to destroy various household insects.

VOLUME OF TRADING DURING NOVEMBER

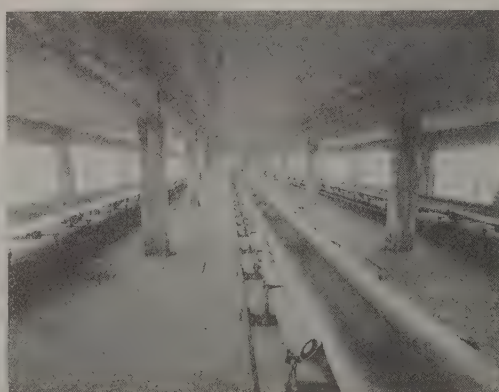
During the month of November the volume of trading in wheat futures on the Chicago Board of Trade was 1,118,467,000 bushels as compared with 1,352,496,000 bushels in October and 553,850,000 bushels in November a year ago. The average daily volume in wheat at Chicago in November (22 trading days) was 50,839,000 bushels against 52,019,000 bushels average for October (26 trading days).

Transactions in all wheat futures for all markets showed a total of 1,339,724,000 bushels for the month, against 1,595,626,000 bushels for October. Kansas City was the only market that showed more trading in wheat futures in November than in October—the totals being 45,567,000 and 44,423,000 bushels respectively. Kansas City likewise showed a slight increase in corn over October trading as did St. Louis. All other markets showed a smaller volume of trading in corn in November than in October. The trading in oats and rye in all markets was less in November than in October.

Considering all futures for all grain the November trading was less than the October trading in all contract markets except Kansas City (an in-



ONE OF THE LARGE GRAIN SEPARATORS



CONVEYOR GALLERY IN FORT WORTH ELEVATOR



DISTRIBUTING SPOUTS UNDER THE SCALES

plant has over 7,500 feet of conveyor belting, provided by the New York Belting & Packing Company.

The additional storage which became available with the completing of this new elevator constitutes a very important increase, one which was an apparent necessity at this time, as the quantity of grain passing through Fort Worth made something of the sort absolutely imperative. With the modern plant now running at full capacity and mechanical efficiency taken care of, the continued growth of the grain trade at this point may be looked upon as well assured.

LESS THAN ONE-HALF OF CORN CROP MATURED

Less than half the corn crop in the corn belt states reached maturity before the first killing frost this year, according to reports received by the United States Department of Agriculture. Usually about 91 per cent of the crop reaches maturity at the time of the first killing frost as compared with 48 per cent this year. Only 23 per cent of the crop in the corn belt is reported as fit for seed, but this is more than sufficient for that purpose. Usually about 60 per cent of the crop is fit for seed. Failure of nearly one-half the crop in the corn belt to mature is attributed more to the late spring and cool summer than to frosts. Much of the corn that has matured is of light weight and some of this is "chaffy."

In consequence of low percentage of matured corn in the corn belt, the corn that was in the dough stage at time of the first killing frost in the belt

in fumigating box cars loaded with grain has been prohibited by nearly all the railroads in the country, except at a few isolated points, because of the danger of fire and explosion.

Tests were made of more than 100 organic compounds and various combinations of these upon three species of grain weevils and the Indian meal moth, before discovery of a suitable fumigant that was non-explosive, non-inflammable, and without injurious action on the grain or the products manufactured from the grain. This new mixture kills practically 100 per cent of weevils, in wheat loaded in box cars, when used at the rate of not less than 40 pounds per 1,000 cubic feet of air space. At present prices the mixture costs 10 cents per pound. Figuring the average box car to have a capacity of 2,756 cubic feet and to be loaded with 1,300 bushels of wheat the cost of fumigating will be less than one cent a bushel, or to be exact, 85 cents per 100 bushels.

Since the old carbon disulphide method, because of the danger of explosion or fire, has been outlawed by the railroads, except at two terminals, and allowed there only temporarily as an emergency measure, it is apparent that but for the discovery of a safe effective method for fumigating, the practice of fumigating in cars would soon have been discontinued. It is estimated that the savings affected by fumigating all weevily grain will amount annually to approximately \$420,000.

The detailed results of this work will shortly be published in a department bulletin. A mimeographed sheet describing how to make and use the new mixture can be obtained from the Bureau

crease of less than 2 per cent) and San Francisco (barley only) with an increase from 583,000 to 729,000 bushels or 24 per cent.

The open contracts during the month of November reached new highs for the season in all grains traded in on the Chicago Board of Trade. The lowest volume of open contracts for the month was on November 1 in all four grains. In wheat the largest open interest was at the close on November 28, with 134,165,000 bushels. Prior to November the high in wheat was on August 20, with open contracts aggregating 125,046,000 bushels. The largest volume of open contracts in corn futures was 71,506,000 bushels on November 20; in oat futures 80,629,000 bushels on November 28, (same date as wheat); and in rye futures 30,471,000 bushels on November 22. The aggregate of open contracts in all futures for all grains, reached a maximum for the season of 314,072,000 bushels on November 28. These figures represent contracts open on the books of the Clearing Members of the Chicago Board of Trade on the short side only, there being an equal volume open on the long side or a grand total of 628,144,000 bushels.

The average open contracts for the month of August, in all grains and all futures on the Chicago Board of Trade was 233,279,000 bushels, and for the month of November 291,794,000 bushels or an increase of 25.6 per cent.

WHEAT of unusual weight was delivered by a farmer at Mitchellton, Sask., recently. It ran a little less than 70 pounds per bushel. It was Marquis and averaged from 37 to 40 bushels per acre.

Vancouver As a Grain Center

The Growth of the Canadian West Coast Port Has Shown Phenomenal Strides Due to the New Grain Movement

By WILLIAM BLAIR

NEW trade routes have been the cause of most of the geographical discoveries in the world. They have also been the cause of many of the wars of the world. It was the search for a new trade route to the Indies which led Columbus to this continent, which prompted many explorations to attempt a new channel through America, and which permitted the settlement of foreign countries.

Opposition was often met by these pioneers of the recently discovered routes and even in these later days it has required no inconsiderable effort to change the trend of intercoastal traffic to the new means—the Panama Canal. Similarly the task of converting to use the same method for routing the wheat of the Canadian prairies is meeting with opposition. Slowly but surely, however, the ripple of the Canadian wheat is wafting westward to find new outlets through Vancouver, British Columbia.

Since the first sod was turned in Manitoba and

the routing of the wheat so that where there was but one elevator poking its work house into the sky along Vancouver's waterfront, today there are four, with two more under construction.

The history of that record and the change in route is an interesting one denoting, as it does, that modern business despite accepted methods, sometimes grasps the possibilities of changing ideas and newer trade channels.

After standing practically idle for the first seven years of its life, Vancouver's first elevator was suddenly galvanized into activity in 1920 when, in spite of an old prejudice regarding transporting wheat through the tropics, a trial shipment was made through Vancouver to England. Upon arrival it graded well and from that nucleus of a few thousand bushels was started the flow which made possible the amount just quoted above.

Actually in 1920 less than one-half million bushels went through the elevator, this was increased in 1921 to something over a million, but in 1922 the

cover a 2,250,000 bushel house which will be ready to handle some of the 1924 crop. They plan a direct service with England and through their own organization there to market the products direct to the consumer.

Nothing daunted by failure E. A. Woodward is again building a small plant for cleaning purposes which will handle about 100,000 bushels and act as a "hospital." The complete combination along the waterfront will give a storage capacity of 6,300,000 bushels, no inconsiderable jump within two years when the feasibility of the route was questioned because of storage facilities.

However, because of the fact that the port is open the year round, storage is not such a big problem. Berthing space for vessels was the feature which prevented even more grain than that handled last year from being exported. Much of the wheat which did pass through went directly to vessels which were waiting their turns at the spouts. In fact, during the busy season of last year as many as 28 ships waited in stream for turns at berths. Virtually the function of the elevators at Vancouver is not storage but elevation. The trouble of berthing space encountered last year has been overcome this season, partially at least, by new jetties and berths and in place of four ships loading at one time 14 will be capable



A VIEW OF VANCOUVER'S GRAIN ELEVATORS

the first crop of the Canadian prairie lands threshed, the flow of the wheat has been eastward via lake and rail or all rail. Fort William and Port Arthur have benefitted, in fact practically subsisted on the bountiful harvests of the Canadian prairies, and Duluth and Buffalo, in a lesser degree, reaped a monetary return from the same source. Naturally these cities are loath to admit the claims of an apparent usurper who seems to step in upon what has been for years the profitable business of railroad companies, steamship concerns and elevator organizations. Yet it would appear from hard cold facts that much of the business has been switched and that westward the course of Canadian wheat is to take its way.

Back in 1912, following a Federal election and presumably from "Pork Barrel" funds was built under the aegis of the, then and now, member, H. H. Stevens, a Government elevator. It had a capacity under 1,000,000 bushels and was looked upon as a rather Utopian affair, in fact dubbed "Stevens Folly" by many. But, last crop year the self same elevator, with an addition broke the world's record for handling wheat in a medium sized house of small storage capacity. During the crop year ending August 1, 1924, 54,690,000 bushels passed through the weighing machines. The "folly" graded up to sample and had justified its existence. And this record was made possible by the change in

exports jumped to 14 million odd, while the increase as stated above was perhaps as phenomenal as shipping annals can produce. It was accomplished too, in the face of adverse freight tariffs, general prejudice and the efforts of established organizations handling the products of the Canadian prairies.

Naturally, when the success of the route was established an impetus was given to shipping in Vancouver, and suddenly, almost over night, a feverish activity was induced. The movement started by the building of an additional to the No. 1 elevator, almost doubling its capacity, a further fillip was given when E. A. Woodward, formerly of Minneapolis, visualizing the possibilities of the new channel, started to build a small cleaning house. Political and other factors militated against the venture, and the same, in an uncompleted state was taken over by the Harbor Commissioners, who were meanwhile building another elevator which is now in commission.

These three, controlled by the Commission, have a storage capacity of 4,100,000 bushels.

Actually in 1920 less than one-half million bushels Spillers of Liverpool stepped into Canada and already have made their weight felt. They purchased a flour mill in Calgary, a chain of country elevators through Alberta and Saskatchewan and completed their arrangements by building in Van-

of being loaded simultaneously. In addition an old hulk, purchased from the U. S. Shipping Board has been converted into an elevator ship and will load vessels in stream, thereby further increasing the facilities.

Among other angles with which the port and shippers have had to contend has been a partial embargo by the railway companies. They, fearing a block in the yards, refuse to accept shipments unless the consignor can prove that cargo space is available. This in some instances has worked a hardship on firms who were shipping. Grain men are asking that this permit system be removed, or that wheat of the same grade be delivered on bills of lading.

Heretofore there has been no grain exchange or cash market in Vancouver, the export trade being in the hands of long established Winnipeg firms who have reaped any benefit accruing from the cheaper route. A grain exchange is, however, in process of formation. Certain formalities have to be overcome before it will actually operate. Among them is the abolition of the permit system mentioned above and it is thought that increased storage facilities will be required to permit Vancouver to function as a primary market. It is expected that this exchange will be in operation early next year, but meanwhile the shipments are somewhat retarded because of a lack of direct buying power.

These are difficulties the pioneers of the route

seem to think not insurmountable. What has occupied their minds up till the present has been the proving of the route as successful. They feel this has been done and look forward with a great deal of optimism to the future.

Already this year with a short prairie crop, nearly twice the quantity which moved in the same time last year has been chartered for, and with increased movement when the Great Lakes are closed to navigation in January and February they think that the already high mark set will be broken.

It has taken hard work and indomitable courage on the part of the handful of men who thought they had, the vision and who put to test their brains and their money to establish the same. Against prejudice, against freight rates that seem unequal and many obstacles, they have demonstrated that wheat will move westward. With the vast markets of the Orient opening up more and more to the lower grades the possibility of tremendous increases seems feasible. Certain it is that never before has so much Canadian wheat moved to China and Japan as did through Vancouver last season and bookings so far this year indicate a similar movement. There

is no apparent reason why this shouldn't be.

Vancouver and the whole of British Columbia is in an open fight with the Railway Commission of Canada to lower the rates on wheat hauled westward. They ask an equalization of tariff to that enjoyed by the eastern cities and quote they pay practically the same to haul the grain half the distance. Should this be granted, and at the time of writing it appears likely that some reduction to equalize the status quo will be made, a problem may confront shippers through Eastern channels. Certain it is that even should Vancouver be able to take 100,000,000 bushels away from the eastern route someone must suffer. There is a growing feeling among Canadian farmers and among many shippers that Canadian wheat should move over Canadian lines and that any benefit that does accrue should be reaped by Canada. That feeling, if once crystalized, may mean that in the near future the grain trade which has been built up between Great Lake ports and Buffalo may be reduced and despite the fact of increased storage facilities there the flow of wheat may turn westward to the new trade route.

It is something to think about.

Hints for the Elevator Millwright

"Big Bill" Davis Tells His Young Millwrights How to Fit Hammer Handles So the Hammer Will "Hang" Properly

By OLD TIMER

WHEN "Big Bill" Davis was not on duty as head millwright at the "Square Deal" Elevator on Massaboag Lake, it was almost certain that Bill would be found either fussing with and improving some of his fine tools, or else would be fishing on the lake. It was hard to decide which of the two latter Bill liked the best, but there was no question whatever about Mr. Davis' love for his job, and his pride in the "Square Deal" Elevator ranged closely to his affection for his wife and family.

Big Bill certainly had the best hanging hammers and hand-axes of any millwright who ever came along, and the youngsters in the millwright game considered it a mighty big favor if Mr. Davis would "hang" a hammer or an axe for them. Once started upon a hammer and a new straight-grained handle, Mr. Davis would show the youngster each and every step of the process whereby the hammer would be made to "hang" so nicely.

First, the eye of the hammer would be cleaned and made free from dirt, grease or rust. Then, with a bit of smooth round stick which would slip easily into the eye of the hammer, Big Bill would test the squareness of the hole and if necessary, he would file a bit here or there to make the hole more true. He also tested the metal on each side of the eye, and if the file refused to "bite" into the metal, Mr. Davis knew the steel was too hard and that there was danger of breaking the hammer-eye under the heavy strain of driving or pulling a big spike.

Whenever one or both sides of the hammer-eye were found too hard, Mr. Davis would "draw" the temper a bit, by locally heating the metal outside of the eye. He would wind wet rags around the hammer face and claws, then with a rod of metal heated white-hot, he would apply heat to the too-hard places. Heating one bit of metal in the forge fire, while another piece was being held against the metal outside of the eye but not inside, as by so doing, the heat would be sent too much into top and bottom of the eye, into claws and hammer-face respectively. Sometimes it was found necessary to heat the pieces of metal half a dozen times before color would "run" on the side of the eye and the metal be softened sufficiently to be touched by a file.

Nowadays, whenever there is an oxy-acetylene welding torch at hand, Mr. Davis does not bother with heated rods of metal, or with rags wetted and tied around the hammer face and claws. Instead, the torch flame is made to play very lightly against the too-hard side of the eye and almost before it can be written about, the color will begin to run and the temper will have been "let-down" enough to give the eye-metal the necessary toughness.

While Big Bill is testing the hammer-eye with the

bit of straight, round stick, he notices whether or not the hammer will hang too far "in" or "out". The latter may be permissible slightly in heavy nail-hammers used for rough work. But never tolerate a hammer head which hangs "in" so far that the fingers, when grasping the end of the hammer handle, will touch the surface into which a nail is being driven flush.

The "in-hang" of a hammer is a nuisance, and Mr. Davis showed the young millwrights how to avoid it by either filing the eye of the hammer, or, if there was no time for such an operation, how to use a temporary makeshift by making a sort of shallow notch in the hammer handle, into which the hammer-head metal would fit in such a manner that the hammer face was drawn down parallel with the hammer handle. It is quite a nice job thus to fit a handle, also to wedge it so well that the handle will be solid and firm in the hammer; but, with careful fitting of handle and wedges, it can be done. But Mr. Davis always advised his young men to take the very first opportunity to knock out the notched handle and to square up the eye and fit in a new handle in the proper manner. The notch, he told them, was a source of weakness which, sooner or later would cause the hammer handle to break.

Mr. Davis told "his boys" that the ideal hammer-eye, in his estimation at least, was one which had been made with a punch or broach in such a manner that the eye was exactly the same size, clear through, from one side of the hammer to the other. Then, he said, "with a not too coarse file, work off the metal all around at each end of the eye, until the opening is about three one-thousandths of an inch larger at each end of the eye than it is in the middle thereof."

With an eye thus made, he told them, the handle should be fitted to the size of the end of the eye, then, when the handle is driven in, the wood will be compressed as it passes the center of the hammer-head, and free to expand again to full size as the wood approaches the outer end of the eye, where a wedge, driven in, will tighten the handle to the limit. Furthermore, he told the young millwrights, that when a handle is driven into a straight hole, or into one which is a bit larger in the middle than at either end, that it was almost impossible to wedge the handle so it would stay tight indefinitely—something quite possible, he told them, when the hole or eye was a trifle smaller at the middle of its length, than at either end, especially at the end from which the handle is to be driven in.

"Fitting the handle," Big Bill said, "should be done with a sharp plane, an equally sharp 'spoke-shave' and lastly, with a wood-rasp or file having moderately fine teeth. Plane the handle to a thick-

ness exactly equal to the width of the eye," Mr. Davis continued. "Try the end of the handle against the eye and plane away, equally on both sides of the handle, until the end of the handle is of exact thickness required. Then, plane the handle back to the same thickness, for a distance a little greater than the length of the hammer-eye. Possibly it may be necessary to use the spoke-shave for this purpose, as owing to the increasing size of the handle, it cannot be planed flat for as long a place as will reach through the hammer.

"But look here", said Mr. Davis, "Be mighty sure that you plane the length of handle flat—and exactly in line with the rest of the handle. If you don't, then the hammer will hang sideways instead of true. You won't need any callipers in order to work the handle to parallel thickness to fit the hammer eye. Just push the handle back and forth, endwise, between the finger tips, and if the flat portion tapers even as little as one thousandth of an inch, the fingers can readily detect the fact."

Then Big Bill told them to work the edges of the handle down flat and parallel, after which the corners should be carefully rounded off until the wood at the end of the handle, when the handle is driven into the hammer eye, will be compressed as the handle reaches the middle of the hammer head. Mr. Davis told the young millwrights that a handle thus nicely and accurately fitted and driven through the hammer, would often stay tight for months or even years without being wedged. But, carefully wedged and cross-wedged, the handle being well seasoned and dry, it would stay tight indefinitely, for many years, provided the hammer be not exposed to rain, snow, or made to work in the water.

"Hammer wedges," continued Mr. Davis, "should be made of as hard and as tough wood as you can lay hands upon. Never use soft wood for wedging handles. Metal wedges are preferable, and they should be forged and left with the scale on them just as they come from the anvil. Wedges driven rough from the hammer, hold better than when filed or ground to a smooth surface. If you must use a polished wedge, catch it in the jaws of a vise and draw-file the wedge crosswise until the polish is gone and the wedge is covered with crosswise file marks.

"Keep all your hammers and hatchets and hand-axes well handled as I have thus told you," said Mr. Davis, as he fondly handled his claw hammer and a machinist's hammer, "and you never will have to stop in the middle of a job and rig up a 'blacksmith's hammer handle' to finish the work—i.e., a wagon-wheel spoke thrust into the hammer for a handle."

HANDLING GRAIN IN CHINA

Wheat buyers in this country find fault with the condition of wheat at times as it comes to the country elevator or mill. A season or two in China would make them think that, by comparison, American conditions approach closely to the ideal. G. D. Woodyard, engineer of the Forbes Company, Ltd., who specializes in the sale of Nurdyke & Marmon Company machinery in the Flowery Kingdom, now a republic, recently described wheat handling practices in China, and his picture is so vivid and interesting that we give it in full.

"In China for the most part, the ancient methods of harvesting grain by hand, threshed with flails, mules and big stone rollers on a threshing floor, the winnowing of the grain by throwing it up in the air and letting the wind blow the chaff away, are practically the same today as a thousand years ago! The grain is delivered to the mill, if by land, in Chinese wheelbarrows, two wheeled carts drawn by oxen, buffalos, donkeys, horses or mules, and sometimes even on wooden sledges. If there is a canal available, delivery to the mill is by sampan or junk. If the junk or sampan is watertight, the wheat may be handled in bulk and on arrival at the mill it is passed up in baskets from hand to hand to the loading wharf where it is put in bags furnished by the mill company. More generally, however, it is handled in bags from the farm to the mill.

"Taking it as a whole, a great deal of Chinese

wheat is as good as any wheat in the world, but due to primitive methods of threshing with flails and stone rollers, and also due to the accumulation of foreign materials en route to the mill, Chinese wheat as actually received at the mill contains the highest percentage of foreign matter of any wheat in the world. Regarding the 'accumulation en route to the mill,' this takes place in various ways peculiar to China. In some cases, weed seeds, fine gravel and dirt is added to the wheat by the local guilds of wheat buyers who thus derive an illegal profit. In other cases a large junk will be loaded with a cargo of wheat in bags and consigned to some mill or godown (warehouse) several hundreds of miles distant. The one in charge is not provided with any money to pay taxes, consequently when he is stopped at various likin stations along the route and a tax enacted, he pays it in wheat. However, he is expected to deliver a certain number of

bags of wheat of a certain weight to the mill at destination. So a stop is made at certain points a little past the likin station, or at the station itself where convenient piles of fine rock, gravel and worthless seeds are to be found. But he always delivers his cargo complete and even sometimes, a little over weight. Due to the high percentage of trash in this wheat as received at the mills, the system of cleaning machinery for flour mills in China is very elaborate, and generally speaking, includes twice as many machines as are required for mills in America."

Before the Federal Government took an interest in grain trades in America, it was frequently charged that farmers would occasionally use a ford in the stream rather than the bridge when delivering a load of oats to the local shipping station, but this practice seems innocuous and even almost virtuous compared with some of the Chinese customs.

Chicago Becomes a Cotton Market

Chicago Board of Trade Commences Trading in Cotton and Announces Completing of Arrangements for Points of Delivery

By EDWARD JEROME DIES

FOR the first time in history, trading in cotton in this part of the country was begun on the floor of the Chicago Board of Trade Monday morning, December 1.

Without a single hitch the vast marketing machinery which made Chicago a center of cotton trading swung smoothly into motion. Hedging transactions from the Southwest and from consumers in this district, together with speculative trades kept the market liquid throughout the session. Thirty minutes before the nine o'clock opening hundreds of exchange members and representatives of various lines of commerce began surging about the broad trading floor. By the time a battery of cameras began their desultory flares from a raised platform, more than 2,000 persons were milling about the pits.

President Frank L. Carey of the Board of Trade made the first transaction, selling 1,000 bales to Wallace C. Winter, who bought for James Simpson, president of Marshall Field & Co. This cotton will be delivered on the contracts and used in the company's own textile mills. Mr. Simpson's organization, like other large consumers in this territory, will use the new market constantly in fulfilling demands of their mills.

Opening prices for January, the first month traded in, were 23.40, which was the high for the day, the low and close was 22.84. William R. Meadows, cotton registrar, announced that there was a very representative volume of trading. Mayor Dever and several Government officials participated in the launching of the new market.

Point of delivery on Chicago contracts is the Houston-Galveston basin, and the contract is based on Texas or western cotton. Last year this exporting point, the greatest in the world, handled about three-quarters of the cotton sent from the United States. Enormous quantities of actual cotton are always available at the joint port, assuring a broad market. It is declared that hedging business may be conducted with minimum risk.

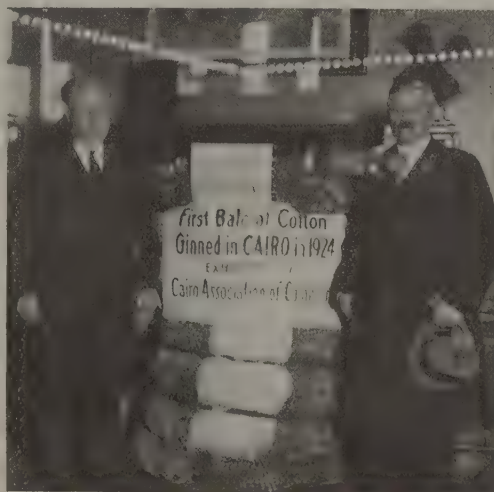
Recently many applications have been coming in from Houston and Galveston warehouses for approval by the Board of Trade directors as regular places for storage and delivery of cotton on Chicago contracts. Some time ago it was stated that if no further warehouses sought designation there would still be ample storage facilities available at those points. Facilities there are declared to be excellent, with incoming tracks on one side of the warehouses and outward bound ships on the other. Total warehouse capacity is placed in excess of 1,500,000 bales.

Under the rules of the cotton futures market, which functions under the United States Cotton Futures Act, each contract is deliverable from one regular press or warehouse located within the Houston-Galveston port area.

It is announced that the contract unit traded in is 100 bales, approximately 50,000 pounds of cotton. Quotations are in cents and hundredths of a cent a

pound, the Board of Trade has announced, one one-hundredth of a cent, or one point on 100 bales equals \$5. One cent or 100 points on 100 bales equals \$500. In event other grades than middling are delivered allowances or deductions will be made on the averages established in the 10 designated markets as provided in the United States Cotton Futures Act.

The grades tenderable on Chicago contracts are the same as those at New York and New Orleans as provided for under the United States Cotton Futures



LAUNCHING THE COTTON MARKET, ON THE CHICAGO BOARD OF TRADE, DECEMBER 1, 1924

Left to right: President Frank L. Carey, of the Chicago Board of Trade and Mayor Dever of Chicago. The Bale of Cotton is the first bale of Illinois cotton, ginned at Cairo, Ill.

Act. Notices of the seller's intention to deliver will be issued in Chicago. Sworn inspectors and weighers will be maintained by the Chicago Board of Trade at Houston and Galveston. They will inspect, weigh and sample the cotton offered for certification. This plan in general is similar to that in effect at New York. A separate warehouse receipt must be supplied, however, for each bale. All cotton will be classified by the United States Department of Agriculture the same as is done at New York and New Orleans. Hours of trading are from 9 a. m. to 2 p. m. except on Saturday, when the market will close at 11.

"It is a historical occasion in commerce," Mayor Dever said. "It is another step in Chicago's forward march as a center of agricultural activities."

Government representatives at the opening included Arthur W. Palmer, in charge of the division of cotton marketing, Dr. Henry C. Taylor, chief of the bureau of agricultural economy, Department of Agriculture, and Chester Morrill, in charge of administration of the Grain Futures Act. Flowers from various business organizations decked the pits and executive offices.

"The Chicago Mercantile Exchange," wrote Presi-

dent Joseph T. Mlnarik, "commemorating today their fifth anniversary of future trading, extend congratulations on your first day of cotton trading."

"Now you are closely allied with Texas and the Southwest," wired President E. B. Guthrie of the Dallas Cotton Exchange. "We wish you every possible success."

President Edward S. Butler of the New Orleans Cotton Exchange wired Samuel P. Arnot, executive vice-president of the Chicago Board of Trade that the quotations had "been received with hearty welcome by our members," and expressed confidence of high success of the new market. Many similar messages came from New York, Philadelphia, Atlanta, Galveston and other cities. President Carey and other officers of the exchange were elated over the smoothness with which the market functioned and the many pledges of co-operation from business groups. When the gong echoed through the ancient clock tower of the Board of Trade, Chicago stepped into its new position as a center of cotton trading.

King Cotton's trek to the North and the West comes after years of agitation for creation of a futures market in the Chicago district. Shortly after the war the plans were revived, but price deflation and subsequent radical attacks upon exchanges resulted in their abandonment. Business interests in this district and cotton merchants of the Southwest prevailed upon officers of the Board to take up the matter again early last summer and after a series of conferences with Government officials and others covering several weeks, the new market was voted into life.

Board of Trade membership which sunk to \$3,500 early this year during the peak of the radical activity in Congress have since climbed to over \$8,000. Success of the new cotton market, it is frequently predicted on the exchange floor, will double the membership values within a year. Greatest enthusiasm prevails in the South, and particularly in the Southwest, over the newly-created market.

"A more splendid commercial tie between the Chicago district and the Southwest could not be established," said Joseph W. Evans, who for years has been a leader of cotton merchant and cotton grower associations. He came to Chicago to pledge the support of the Southwest.

"It is an epoch in cotton marketing," declared E. B. Guthrie, of Dallas, one of the largest cotton exporters. "Delivery on Chicago contracts at the joint port of Houston-Galveston will prevent the 'squeezing' of any spot month. The trade will have far better knowledge of the amount of spot cotton available than is now the case. This means much greater safety for the exporter. By tendering at Houston or Galveston he will know at any time the exact amount of stock on hand. In like proportion will the grower be benefitted. Southwestern spinners will find an advantage in buying Chicago contracts, which will practically assure the receipt of Texas cotton with its superior spinning value."

Creation of the cotton market comes just 77 years after the formation of the Chicago Board of Trade by a little group of merchants. The town was then a wagon-load market. The exchange now handles 400,000,000 bushels of grain annually, and in 65 years total receipts have been 13,000,000,000 bushels and shipments from Chicago 10,000,000,000 bushels. To conduct this vast business members of the exchange maintain bank balances aggregating \$200,000,000.

During its 77 years of existence the steadily growing exchange has been the storm center of innumerable political crusades. Victor of a hundred wars, it stands a dramatic figure in the world of commerce, the hub of the entire grain industry. For two years the exchange has functioned under Government supervision, and the new cotton market will operate under the United States Cotton Futures Act. Success of the cotton market will mean that the picturesque old building with its high windows and imposing clock tower brooding over the foot of La Salle street will be replaced with a modern skyscraper.

THE congestion in nearby stocks of grain as a result of the sharp falling off in Continental demand has caused a reaction in the British markets.

NEW FACTS ON THE ANGOUMOIS
MOTH

Throughout the eastern wheat regions there has been a very severe outbreak of the Angoumois grain moth during the past four years. Special investigation of the pest has been conducted for two years by the Bureau of Entomology of the United States Department of Agriculture. New facts concerning its biology have been developed. The infestation of wheat in the field at the time of crop maturity has been found to be much greater than was formerly believed. The importance of prompt harvesting and threshing is consequently emphasized. During 1922 it was found that in a badly infested region Angoumois grain-moth infestation was reduced to less than 2 per cent by prompt harvesting, threshing, and storage, whereas on neighboring farms when threshing was greatly delayed infestation ran as high as 80 to 90 per cent.

LONG RANGE WEATHER
PROPHECY

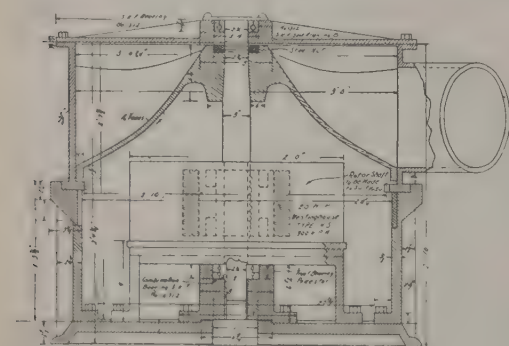
Prophecies of summerless years and other seasonal catastrophes need have no disturbing effect upon business the Chamber of Commerce of the United States has concluded after consulting the Weather Bureau officials of the Federal Government. This assurance is given in response to an inquiry from one of its members.

In the first place it is contended that long range forecasting is not possible. A week at the outside is the limit fixed by scientists. It is conceded that changes in ocean temperatures might have some effect but enough is known about ocean temperatures to afford any basis for prophecy. The summerless year, therefore, is in the lap of the gods and its approach cannot be foreseen until it is well upon us.

The classic example given by the prognosticators is the severity of the reputed weather of 1816. "The records of that year," says the Chamber in its response to the inquiry, "are very scanty. Present day accounts of the weather at that time lose nothing in the telling. It is a fact, of course, that the summer then was unusually cold. Records indicate that the corn crop was a failure, although other crops, such as wheat, seem to have come through all right."

NEW TRIMMER WITH REDUCED
OPERATING COST

An invention of recent origin which has been attracting attention among the members of the grain trade in and about Vancouver is the Shipton Trimmer. A test was made on the *S. S. Buenos Ayres*. The machine used was built with a view to obtain-



CROSS SECTION OF SHIPTON TRIMMER

ing practical data from which to construct a larger machine. The test was witnessed by a number of interested parties, among whom was the superintendent of the Government elevators. Mr. McLean, who was then superintendent, is reported to have said that as far as he could see the machine operated to his entire satisfaction, the only criticism he could offer was in regard to the height of the machine. The inventor, J. D. Shipton, soon after asserted that he had overcome this by cutting the original height of 8 feet 6 inches to 4 feet 6 inches.

The invention wholly eliminates shovelling in the hatches, and will load the ship in less than half the time, as the machine trims the wheat at the same rate as it can be delivered from the belts, which is about 10,000 bushels per hour, and is a much desired advantage. In addition, its large reduction in cost of loading makes it valuable at all loading points. It has been estimated that when arrangements are completed and necessary machines built, the company will be prepared to load large

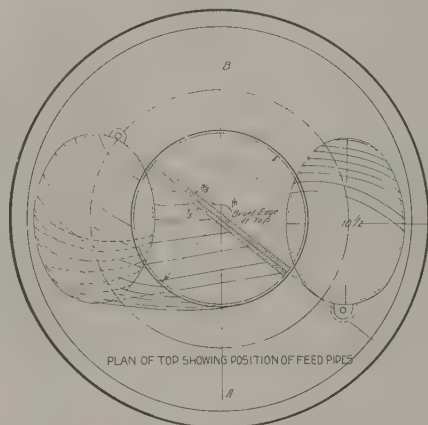


WORKING MODEL OF THE SHIPTON TRIMMER

ships for \$1.50 per thousand bushels, and a little more for three-deckers. The price now being paid is around 20 cents per ton, or equivalent to \$6.40 per thousand bushels.

When making the original tests, the machine handled 3,200 bushels per hour, and from the operation of this machine Mr. Shipton was able to make a design for larger capacity. The new machine takes 6,000 bushels per hour.

Two machines are placed in each hatch, one on each side of the shifting board. The operation is



TOP VIEW OF GRAIN TRIMMER

then as follows: If it is a three-decker ship, of say four hatches, one elevator feed pipe delivers 6,000 bushels per hour. This is fed into a properly designed breeching pipe, as per the accompanying sketch, and this in turn feeds into the machines at once. The feed pipe delivers a pile of wheat into the bottom of the hatch, and it is piled high enough for the machines to be located in such a position that the outlets are just below the combing. It is then lowered onto this pile in any position, provided it is vertical, and the wheat is thrown to the bulkhead in diametrically opposite directions, and thus the wheat is piled in the manner illustrated.

The whole head of the machine revolves completely around, which makes it possible to put the wheat in any position. In the small hopper there is placed a diversion plate in order to regulate equal amounts to each outlet if desired. It is a conoidal body, varied somewhat on its surface in proportion to the head of the wheat supply, the wheat having an initial velocity of about 1,500 feet per minute. This velocity is accelerated about four times.

The new mechanism has been fully protected by

patents secured by its inventor, Mr. Shipton. The working model has been designed to a scale of 60 to 1, and the model delivers 1.66 bushels of wheat every 56 seconds. The only significant difference between the model, pictured here, and the regulation machine for commercial use is that the feed hopper has not the same twist, and is somewhat higher in the model, in proportion.

PRESIDENT COOLIDGE ON
AGRICULTURE

In his address to the short session of Congress which began on December 2, President Coolidge had the following to say about the present condition and future of agriculture:

No more important development has taken place in the last year than the beginning of a restoration of agriculture to a prosperous condition. We must permit no division of classes in this country, with one occupation striving to secure advantage over another. Each must proceed under open opportunities and with a fair prospect of economic quality. The government cannot successfully insure prosperity or fix prices by legislative fiat. Every business has its risk and its times of depression. It is well known that in the long run there will be a more even prosperity and a more satisfactory range of prices under the natural working out of economic laws than when the government undertakes the artificial support of markets and industries.

Still, we can so order our affairs, so protect our own people from foreign competition, so arrange our national finances, so administer our monetary system, so provide for the extension of credits, so improve methods of distribution as to provide a better working machinery for the transaction of the business of the nation with the least possible friction and loss. The government has been constantly increasing its efforts in these directions for the relief and permanent establishment of agriculture on a sound and equal basis with other business.

It is estimated that the value of the crops for this harvest year may reach \$13,000,000,000, which is an increase of over \$3,000,000,000 in three years. It compares with \$7,100,000,000 in 1913, and if we make deduction from the figures of 1924 for the comparatively decreased value of the dollar the yield this year still exceeds 1913 in purchasing power by over \$1,000,000,000, and in this interval there has been no increase in the number of farmers. Mostly by his own effort the farmer has decreased the cost of production. A marked increase in the price of his products and some decrease in the price of his supplies has brought him about to a parity with the rest of the nation. The crop area of this season is estimated at 370,000,000 acres, which is a decline of 3,000,000 acres from last year, and 6,000,000 acres from 1919. This has been a normal and natural application of economic laws, which has placed agriculture on a foundation which is undeniably sound and beginning to be satisfactory.

A decrease in the world supply of wheat has resulted in a very large increase in the price of that commodity. The position of all agricultural products indicates a better balanced supply, but we cannot yet conclude that agriculture is recovered from the effects of the war period or that it is permanently on a prosperous basis. The cattle industry has not yet recovered and in some sections has been suffering from dry weather. Every effort must be made, both by Government activity and by private agencies, to restore and maintain agriculture to a complete normal relationship with other industries.

It was on account of past depression, and in spite of present more encouraging conditions, that I have assembled an agricultural conference made up of those who are representative of this great industry in both its operating and economic sides. Every one knows that the great need of the farmer is markets. The country is not suffering on the side of production. Almost the entire difficulty is on the side of distribution. This reaches back, of course, to unit costs and diversification, and many allied subjects. It is exceedingly intricate, for our domestic and foreign trade, transportation and banking, and in fact our entire economic system, are closely related to it. In time for action at this session I hope to report to the Congress such legislative remedies as the conference may recommend. An appropriation should be made to defray their necessary expenses.

ARGENTINE WHEAT CROP

The first official forecast of the Argentine wheat crop is 190,000,000 bushels compared with 247,000,000 bushels produced last year, according to a cablegram received by the United States Department of Agriculture from the International Institute of Agriculture at Rome.

About 70,000,000 bushels including seed, feed and grain milled for food are needed for domestic re-

quirements, and there will be available for export and carry-over during the year January 1 to December 31, 1925, some 120,000,000 bushels from the current crop, provided the final returns of the crop bear out the estimate given.

Stocks of wheat on hand October 1 were reported at about 27,000,000 bushels, and allowing 15,000,000 bushels for consumption during the remaining three months of the year, the quantity of old crop available for exports and carry-over would be about 12,000,000 bushels.

CANADIAN WHEAT SURPLUS REDUCED

Canada may export about 180,000,000 bushels of wheat this year should the November crop estimate be borne out by the final returns, declares the United States Department of Agriculture in an analysis of crop and carry-over figures. Canada last year exported 343,000,000 bushels.

The carry-over of 28,000,000 bushels from last year's crop plus the estimated crop of 272,000,000 bushels this year makes available 300,000,000 bushels for this year's supply compared with 486,000,000 bushels available for last year.

The grade of grain now in elevators indicates that the quality of the crop is below that of last year. Only 40 per cent in elevators November 1 graded No. 2 Northern Spring or better, compared with 60 per cent in 1923 and 80 per cent in 1922. The lower grading of the bulk of the wheat may indicate a larger percentage of unmerchantable wheat. Last year it was estimated that about 4 per cent of the crop was unmerchantable and 4 per cent was lost in cleaning.

Losses from unmerchantable grain and in cleaning have varied in recent years from 5 to 10 per cent of the gross production. Estimating the loss this year at 10 per cent would reduce the quantity of merchantable grain to 244,000,000 bushels, of which about 80,000,000 bushels will be needed for seed and for bread, leaving 193,000,000 bushels for export and carry-over at the end of the year. Stocks at the end of the year have varied in recent years from 10,000,000 to 28,000,000 bushels.

GOVERNMENT AND CO-OPERATION

Agricultural co-operation should be kept free from domination by government agencies or commercial interests, says the Annual Report of the late Secretary of Agriculture, Henry C. Wallace, which has been transmitted to the President by Secretary Howard M. Gore.

Good, sound growth in the co-operative movement, says the report, has been somewhat retarded in recent years by over-enthusiastic persons who have held it up as a panacea for all the ills from which the farmers are suffering. The mere organization of a co-operative association is not the end to be attained. It is only the beginning. Success in co-operation depends on finding men capable of running co-operative associations, on the loyal support of the membership, and on getting a sufficient volume of business. Some converts to the co-operative movement urge that the Government should proceed to organize the farmers in co-operative associations. But if the Government should ask the farmers to join some particular co-operative association it would put itself in the position of guaranteeing an enterprise without having an authoritative voice in its management. There is confusion in the minds of promoters of co-operative enterprises as to what the Government may properly do.

Bills have been introduced in Congress in the last two years which would put the Government squarely into the business of promoting co-operative associations, it is pointed out in the report. These bills would set up a great Federal overhead agency and secondary boards of control and would have these bodies assume control of a number of highly important activities such as the dissemination of market news, a service which is already carried on efficiently by the Federal Department

of Agriculture and which in the interest of the farmers should be kept in the control of a well-organized impartial permanent Government department devoted to the service of agriculture and free from entangling business alliances.

The relationship of the Government to co-operation should be one of service. It should help the farmers market their crops just as it helps them to produce crops, not by doing the work, but by supplying information which the farmers can not get for themselves. To go further would be to injure rather than aid the co-operative movement. The need for strong co-operative marketing associations cannot be overemphasized. They are absolutely necessary to bring about efficient and economical marketing and standardization of crops, but the movement should be truly co-operative and should be controlled by its membership.

NEW CONCRETE ELEVATOR AT DAYTON

On account of the export business having been subnormal in the last few years, the market as a whole has suffered. Many of the smaller markets in the Middle West are developing at the expense of the larger terminal points. The development of Federal grain standards and the supervision of



VICTOR E. HERTER & CO. ELEVATOR, DAYTON, OHIO

licensed grain inspectors has given some of the smaller markets the trading basis formerly only enjoyed by some of the larger markets, such as Chicago. Buyers may now make purchases with confidence in these smaller markets and secure direct shipments without the attendant charges which are imposed if the grain passes through Chicago. These and other factors have contributed toward popularizing the smaller markets, and some of the elevators in inland cities of lesser size have been experiencing added possibilities.

Victor E. Herter & Co. have erected a new elevator at Dayton, Ohio, with a storage capacity of 75,000 bushels. The plant is of the monolithic concrete type, providing cylindrical units as shown in the accompanying illustration. The constituent parts include six round tanks, each of 16 feet diameter, and two interstice tanks, 67 feet in height.

One of the interstice tanks is used for the elevator legs, manlift, and like equipment, and the monitor above this interstice has the requisite turnhead and cleaning machinery. This latter consists of an Invincible No. 6, which has a capacity of 1,000 bushels per hour. There is also a Western Sheller of 1,000 bushels' capacity. Two 20-horsepower motors and one three-horsepower motor are used in operating the plant. The operative power and lighting is all electrical.

A McMillen Dump is provided. There is a cast iron head and boot, and the head pulley is 54 by 17.

The elevator leg is of block iron, and the buckets are 15 by 7 inches. All ring type oiler bearings are used. The machinery was furnished and installed by Fred R. Childers, of Indianapolis, Ind., and the structure was planned and erected by the Polk Genung Polk Company, of Fort Branch, Ind.

The scale house is 16 feet in diameter and 37 feet high. In the upper part is a bin 24 feet deep, divided into three compartments by wooden partitions. These three compartments are used for cob, screenings and dust storage. Howe Automatic Scales of 20-ton capacity are used. The basement area is equipped to approximately one-third the entire plan area, and houses conveyors, boot, sheller, motors, and similar equipment. The Monitor is 33½ feet high and has a diameter of 18 feet.

Lifting for dumping grain is accomplished by power lift operated from the steel frame above the scale house entrance. The entire structure is of the Polk System Monolithic concrete and the round tanks have walls which are six inches thick. The roof is also of concrete covered with sealit.

The Herter company have expressed themselves as well pleased with the operation of the new plant, and it may well be said to be a model of permanence and efficiency. The owners deal in grain, hay, field seeds and millfeed, and are members of the Chicago Board of Trade.

"JIM DUNN"

By HOOZUS

Jim Dunn, who runs the elevator at Sperry Siding, says: "About this time o' year ever' farmer thinks his corn is th' driest in th' county. Now, there's Ol' Bill Turley. Bill usely has got good corn, but a right smart lot o' it goes int' bottles, an' Bill's usely pretty full o' th' extract himself.

"He comes in th' other day, an' he says t' me, he says: 'Dunn! I got th' best corn in this here whole state an' she's dry as a bone right now—which is a heap sight drier than this here country is with their fool Prohibishun. But I'm a' goin' t' tell ya right now, that if ya buy my corn, ya're a' goin' t' pay me more money than ya're payin' these other scrub farmers 'round here.'

"Well, I see Bill's pretty well 'lit up,' so I says to him, I says: 'Bill! you bring in a load o' that there corn, an' when ya do, 'spose ya slip a bottle o' that there "white mule" int' your pocket, 'stead o' tryin' t' carry it all in your stummick. I reckon after ya're in a while, you an' me'll be able t' agree on th' price o' that corn.'

"Bill, he reckoned so too, an', ennyway, Bill makes mighty good white mule."

LITTLE TIPS FROM "JIM DUNN"

Christmas looks a long way off in July; but it's surprisin' how quick it get around—specially if ya haven't made good use o' your time.

President Coolidge is a' goin' t' help th' farmers. Wonder if that will include th' ones in th' elevator bizness, too?

It's about this time o' years that th' elevator man wishes he'd a' bought a 'lectric motor last summer.

For a nice, cold place in th' winter time, try a butcher shop or th' driveway of a elevator. Ya won't puspire none in either place.

Some elevator men oughta throw away their brooms an' buy a flock o' chickens. They never use th' brooms, ennyway, an' they could eat th' chickens an' save th' spilled grain that way.

Speakin' o' sidelines: Why wouldn't boot-leggin' go all right with th' elevator bizness?

Chris'mas bills an' winter chills sometimes makes a helluva day out of a holiday.

There's jest two classes o' peepole that oughta take a trade paper regular; those that are takin' it now, an' those that ain't.

If ya made some money this year—an' if ya didn't ya never will—ya oughta blow about it some by puttin' a fresh coat o' paint on th' ol' elevator.

STEEL sheets, galvanized, are being used in Argentine to stop the ravages of locusts. The sheets are erected by the grain farmers who dig ditches in front of the barriers into which the marching hosts of locusts fall and are destroyed by the farmers.



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CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

Official Paper of the Grain Dealers National Association and of the Illinois Grain Dealers Association

CHICAGO, ILL., DECEMBER 15, 1924

SEED CORN SCARCE

UNLESS the grain dealer has been indulging in a short Rip Van Winkle for the last 30 days he must know that only about half the corn crop has matured to a point where it has any value as seed. As a matter of fact seed corn of any kind is going to be scarce in the spring and seed of good germinating test will be at a high premium.

The best way to select seed corn is in the field. This is outside the province of the average elevator operator. The next best way is to pick out the most desirable ears from the various lots that come to the elevator and to set aside a place for racks so that it can be dried out properly. If you are not sure of the best method of selecting and storing corn for seed get the bulletins on those subjects from your state agricultural college or experiment station. Every one in the corn belt has issued them. There will be an attractive profit in good corn, and your farmer friends will not only be glad to pay the price but thank you for the privilege.

CONSTRUCTIVE WORK

OCASIONAL reading of a new strain of grain being developed, gives but a vague idea of the amount of work going forward in the Department of Agriculture, directed toward the improving of the quality of our field crops and decreasing the hazard for the grower. Some idea of the magnitude of this work can be gained from the annual report of the Department of Agriculture, prepared by the late Secretary Henry C. Wal-

lace, in which is cited the fact that 1,000 varieties and strains of wheat have been tested for bunt resistance alone. This work is constructive in every respect, and is simply indicative of the good the scientists in the Department are doing.

In fact there is never made a complaint of the cost or time consumed in these scientific investigations. There have been times, however, when politics rather than science has seemed to be the dominant influence and the work done under the stimulus of politics is often of doubtful value as to the end sought and of dubious character as to the means employed. The early efforts to stimulate co-operative marketing came under this latter class. During the past few years even the co-operative investigations have been along constructive lines, however, and undoubted good is being derived from the saner point of view.

DANGER IN THE POWER PLANT

WHEN you put in a new power plant do not imagine that you have freed yourself from all fire hazard. There have been recent fires started from about every kind of power plant except water: Steam, electric motor, heavy oil engine, gasoline. Each one has its danger spots and needs watching. A power plant is a willing servant and does a lot of work for you. It deserves care and attention.

Soft or mine run coal will burn spontaneously under proper conditions; motor bearings will burn out, the exhaust pipe of an oil engine will get full of carbon and burn, and gasoline engines will backfire. These are some of the common hazards to watch for. The old water power is immune to these troubles, but has a few of its own when the water is low or too high. We doubt if even a grain belt politician would promise freedom from power troubles if he were elected, and they will promise almost anything.

THE RISE OF VANCOUVER

WE KNOW of no grain market which has had so spectacular a rise as Vancouver, B. C. A futures market is being established and should the movement of wheat increase in the next five years in anything like the ratio of the past five, it will be one of the greatest markets and export ports on the continent. A readjustment of freight rates in the prairie provinces, which would give Vancouver a greater area to draw from, seems likely, and that will go far toward the further development of the port.

No doubt the eastern seaboard will feel the withdrawal of millions of bushels of its accustomed commerce in grain, but this will not stay the certain development of the West. In fact Canada, eastern Canada, can well afford to make a temporary sacrifice to build up its west. There are millions of fertile acres, good wheat land, that have never felt the plow. These are valueless at present for lack of settlers, and every encouragement should be given to building up population, to making the farms profitable by favorable

rates and extension of rail lines and by giving the West a market that it can call its own.

This is all in the future, but the near future and there seems no question but that Vancouver is destined to become the queen city of a mighty empire embracing much of the prairie land in the West.

THE A. F. B. F. AGAIN

THE American Farm Bureau Federation re-elected O. E. Bradfute as president, thus going on record again as opposed to the extreme radical group in the organization. A year ago when the radicals tried to get control of the organization, Mr. Bradfute took sides with the conservatives and his re-election shows that this latter element is still in control.

But the term conservatism as applied to any part of the Federation appears to be justified only in comparison with pure bolshevism. We would hardly consider a resolution conservative which endorsed the principles back of the McNary-Haugen bill; which favors more Government aid to co-operatives; and which endorse the Federal Trade Commission. All of them smack too much of paternalism to be rightly so termed.

Resolutions, however, are of little consequence and no one pays much attention to them. In fact no one will pay much attention to the American Farm Bureau Federation unless it justifies itself, not in theorizing about Government, but getting down to brass tacks in helping the farmer where he lives—on the farm.

HOW ACCURATE ARE REPORTS?

A LARGE proportion of the reports from the country, upon which our Government crop estimates are based, are sent in by elevator operators and millers. These reports of acreage, condition, etc., are the result of the best judgment of the senders. The average accuracy of these reports over a period of years is so high that the trade has come to rely with confidence on the estimates made from these reports. Once in a while, however, the estimates have been wide of the mark and have required adjustment of millions of bushels of grain to balance up with the more rigid census report. Under just what conditions the greatest number of mistakes occur we do not know. We doubt if the subject has ever been investigated. But this month has witnessed an example of poor guessing that is rather remarkable.

Early in December a certain paper asked its correspondents to report on the hog situation. A great majority of replies from every state indicated that farmers were shipping hogs rapidly even though they were not finished. "Shipping light hogs because of scarcity and high price of corn," was the burden of almost every report. These reports were sent out from the fifth to eighth of December, so they must have referred to the same run of hogs that reached the markets during the week beginning December 8. There is no question about the hogs being

shipped. Chicago received 316,300 during the week. But where did those "light weight" reports come from? The average weight of those 316,300 hogs was 227 pounds, which is about eight pounds above the 10-year average.

Is this discrepancy due to the fact that the reports were based on farmers' gossip rather than personal investigation? It is a well known fact that most farmers are pessimistic when they talk about their affairs. Conditions are never just right. They all have an injury complex. If the report on hogs is an indication of the truth of farmers' complaints, it does not look as if the report on "intention to plant" would have much value.

On the other hand, this may have been another of those unexplained circumstances which sometimes occur. If any of our country readers can give an explanation of these reports we would like to hear it.

NEW DEVELOPMENTS

AMONG the changes which the grain trade will have to prepare for in the next four years will be the tendency toward combinations of grain handling firms. The Grain Marketing Company led the way, and if the affiliation of the strong concerns remain as steadfast to its interests as are expected, the company will hold a dominant position in all departments of the trade. The competition of this company can only be met successfully by aggregations of capital which is now dissipated in the maintenance of numerous small concerns which will feel their handicap more and more as the months pass. Whether or not the overhead of the Grain Marketing Company proves topheavy remains to be seen, but the fact remains that it is able, by reason of its size, to carry out contracts of both purchase and sale beyond the power of companies who were able to get their full share of business in the old days, but who now find themselves at a disadvantage.

The Grain Marketing Company received its charter under the Co-operative Law of Illinois, else its size and influence might have been questioned. With this company in the field, however, it will be difficult to prove a charge of monopoly against any combination which might be formed. How soon and how far this tendency toward combination will be manifested, only time can determine. And only time can demonstrate what changes in the grain marketing machinery will be necessary. Perhaps not any, but probably a considerable number. The effect will be greater on individual firms than on the trade as a whole.

PROSPERITY AND SAFETY

PLANT operators do not like to be told that in the majority of cases the fires that occur are due to their own carelessness or inattention, but the records are against them. When a plant is losing money no one cares much whether it burns or not. So a great many of them do burn. No one sets fire to them, but on the other hand no one makes it

his business to see that every hazard is guarded, every possible source of fire made safe, as he would do if the plant were making large profits for him.

During the first half of the year, the losses from mills and elevators destroyed by fire was tremendous, but when the grain and flour business began to pick up, as it did after the new crop began to move, the number of fires fell off as if by magic. Elevator operators had an incentive to keep their houses from burning and they did it. This isn't a matter of guess work. It is statistics.

Now the result of recording these statistics and the lesson they teach has put a new idea into the head of the mutual mill companies. They argue that a plant must have commercial value as well as a physical value if the full coverage is to be collected in event of fire. A plant that is not making money has little commercial value for the time being. If a policy were written so that only a part of the coverage could be collected when business was poor, then a fire would cease being a godsend, as it has been in many cases, and would be an added calamity to be avoided. More care would be taken even in slack seasons.

There is good logic in this position, and if the mutual companies put such policies into effect the industry as a whole would be better off. It is bad enough to have business bad, without piling it on by increasing insurance rates through the carelessness of your neighbors in the industry.

EDITORIAL MENTION

We wish you all a cheerful Christmas and a bountiful new year.

At the present level of prices on the grain market one should be prepared for erratic price swings of wide range.

Good seed corn is reported to have sold at \$12 a bushel in Iowa recently. There will be some new automobiles in those Iowa districts where the corn ripened.

Reports from Canada and Argentine do not tend to discourage American farmers any. America has reason to be thankful this year as it has not for a long time.

We needed a strong object lesson this year in economics and the world shortage of wheat furnished it. Crop shortage and low prices never yet slept in the same bed.

The Weather Bureau says that weather predictions of more than a week in advance are impossible. Guess the Weather Bureau hasn't read any of the Bitters or Baking Powder Almanacs. They give you the weather a year in advance, and for nothing.

The Department of Agriculture has issued tables for standardizing tables for protein and moisture content of wheat. In the old days a miller would chew up a little of the

wheat and could estimate not only quantity but quality of gluten. In these days of large mills a method more mechanical has to be used. But we would match the strong teeth of an experienced miller against a superficial laboratory test.

The opening of the cotton market on the Chicago Board of Trade on December 1, was an historic event the importance of which only the years to come can measure. We suspect that the young men who participated will recall it in after years as one of the important events of their lives.

Southern markets are preparing for increasing activity in the export of grain. This month is shown a splendid new elevator at Fort Worth, and soon we will have another at Houston. It will be many years before we are on a domestic basis in grain and when that time comes these elevators will be just as useful for the importers.

With all the complaints about "gambling in grain" which we have been hearing in past years, President Carey of the Chicago Board of Trade makes it plain that without this so-called gambling, which it is not, the farmer would be in a sad state of ignorance of values of their grain. Even the radio would not help him, for there would be no price changes to record.

Milwaukee is trying to encourage direct, all water shipments of wood pulp from Europe with return cargoes of grain. In a few years, no doubt, this will be a common practice. Along this same line, a friend tried to get us excited recently about a new grain elevator to be built at Michigan City, Ind., to furnish grain cargoes for the return voyage of boats that brought pottery clay to that port direct from Europe.

Rudolph A. Clemen, economist of the Illinois Merchants Trust Company, gives terminal operators something to think about in the article "Changes in the Relation of Grain Markets." If Chicago's business is indeed shifting from the domestic to the export basis then it is time the smaller markets became alive to the fact and began hustling for the domestic trade. It sometimes happens that we can be in the midst of such a movement and yet not see it. Mr. Clemen has the perspective that only a disinterested spectator can obtain.

The late Secretary Wallace had something to say about co-operation in his last report to the President, which contains subject for thought. "Good sound growth in co-operative movement has been somewhat retarded in recent years by over-enthusiastic persons who have held it up as a panacea for all the ills from which the farmers are suffering." These same over-enthusiastic persons have not only retarded the growth of co-operation, but have also combatted the advancement of every constructive idea and have even tried to deny the economic law. Incidentally they have bled the farmers of hundreds of thousands of dollars in cold cash.

H. E. HALLIDAY
Cairo

NEWS OF THE TERMINAL MARKETS

W. H. TOBERMAN
St. Louis

FRANK L. CAREY TO HEAD TICKET

Frank L. Carey, president of the Chicago Board of Trade the past year, has consented to serve another year and will head the regular ticket for the annual election in January. Henry Rumsey of Rumsey & Co., who has been in the directory for two terms is slated for vice-president, to serve two years.

The directors are: James K. Riordon to serve another term; Siebel C. Harris, F. B. Fox, A. L. Lindley and E. S. Westbrook, for three year terms.

Retiring directors are: Joseph Badenoch, Louis Brosseau, Henry Rumsey, R. W. Bell.

The nominating committee consists of Joseph Lamey, Joseph Simons, Allan Clement and Frank G. Coe.

LESS LEAKAGE IN MILWAUKEE

The records of M. H. Ladd, chief weighmaster on the Milwaukee Chamber of Commerce, Milwaukee, Wis., showed that of all the grain laden cars received and unloaded at Milwaukee, Wis., up to November 1, 1924, 14 per cent were found to be in a leaking condition. This compares with 19 per cent of leaking cars during the same period of the year preceding.

Cars containing wheat led in the percentage of those arriving in a leaking condition averaging 20 per cent. The record for other grains was: corn, 9 per cent; oats, 14 per cent; barley, 14 per cent; rye, 13 per cent; flaxseed, 10 per cent; miscellaneous grains, 9 per cent.

OPEN INTEREST SHOWS INCREASE

The open interest in all grains traded in for future delivery on the Chicago Board of Trade reached the highest of the season in November, according to figures given out by Dr. J. W. T. Duvel, the maximum in wheat being on November 28 and amounted to 134,164,000 bushels. Corn aggregated 69,929,000 bushels at the same time and oats 80,629,000 bushels while rye touched high November 22 at 30,471,000 bushels. The aggregate open interest of all grains was the highest on November 28 at 314,072,000 bushels.

The average daily open interest of wheat during November was 119,173,000 bushels; corn, 67,044,000 bushels; oats, 76,459 bushels; rye, 29,116 bushels.

During November 1,898,645,000 bushels of grain were traded in for future delivery at Chicago, and in all markets a total of 2,233,071,000 bushels.

THE OATS SITUATION

Bartlett Frazier Co., Chicago, Ill., issued a very interesting market review on the domestic and world's situation on December 12. For the United States situation it said:

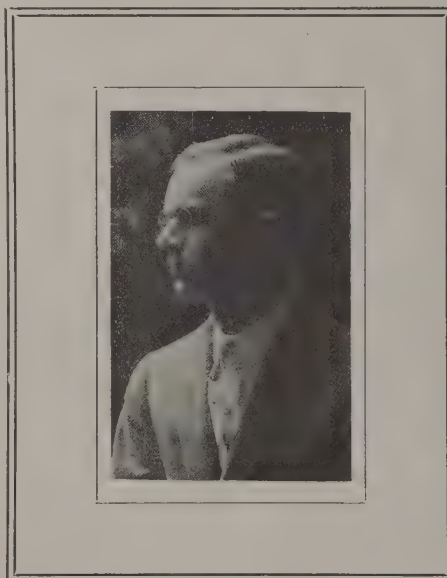
This situation indicates an oats export demand upon this country during the current cereal year, possibly in volume sufficient to become a price making factor, and suggests a review of our own domestic situation. Our crop this year is one of good volume and excellent quality, the preliminary estimate being for 1,509,000,000 bushels against 1,300,000,000 last year, and an average of 1,255,000,000 bushels for the five years 1919-23. The farm stock of old oats carried over on August 1 this year was 65,256,000, and the visible supply 3,086,000 bushels, or a total carry over of 68,342,000 bushels. Last year the similar figures were farm stocks 70,082,000 and visible 15,477,000, a total of 85,559,000 bushels, and for the five years 1919-23 the average was, farm

stocks 90,713,000 and visible 22,795,000, or a total carry over of 113,508,000 bushels.

Our carry over of oats this year was 17,217,000 bushels less than last year and 45,166,000 bushels below the average of the last five years. Our domestic oats, crops and carry-over, at the beginning of the current cereal year therefore was 1,577,000,000 bushels against 1,386,000,000 last year and an average of 1,369,000,000 bushels for five years. It appears that we start the season with approximately 200,000,000 oats above supplies of recent years.

OMAHA GRAIN EXCHANGE ELECTS OFFICERS

At the recent annual meeting of the Omaha Grain Exchange, C. S. D. Sturtevant of the Trans-Mississippi Grain Company was elected president; Frank C. Bell of the Urdike Grain Corporation,



C. S. D. STURTEVANT

first vice-president; C. C. Crowell, Jr., of the Crowell Elevator Company, second vice-president; W. J. Hynes of the Hynes Grain Company, treasurer. Frank P. Manchester was re-elected secretary.

Mr. Sturtevant is one of the prominent grain merchants of the Omaha Grain Exchange, with which he has been identified since the early years of its history, serving on its board of directors and as its vice-president for a number of years. He has also been identified with the grain industry through his work and membership in the Grain Dealers National Association and was elected its first vice-president at the annual meeting held at Cincinnati this year.

DEMAND FOR OATS DISAPPOINTING

The arrivals of oats the past week have been rather light but a few cars that are arriving, have been sold under western quotations. It is very difficult to have eastern buyers follow the recent sharp advances in oats, and prices here on the same day have ranged from two to four cents under the market. Some resellers having a pretty good profit have been disposing of their oats as best they could. Elevators are still heavily loaded and demand is very disappointing. While there is considerable talk of oats taking the place of corn, it is not apparent in the feeding districts in the east. Oats

cannot take the place of corn to any great extent. Feeding requirements are extremely light.

Receipts of corn have been very good, most of it being old with some dried corn from the western terminal markets. Very little corn is here from nearby states with the exception of an occasional car of ear corn. Some of the ear corn is extremely bad while other cars show up fairly good. All arrivals of Yellow shelled of desirable grades have met ready sales. Only the very best grades of sound, clean, Yellow ear corn are merchantable here and anyone having such corn finds a good market. The railroad situation is very good with a noticeable slowing up in the movement of cars from some directions. This is no doubt due to the change in the weather conditions the past 10 days. While there is much talk about improved business conditions, it is not noticeable in this territory. Coal mines to a great extent are down and have been down for months and the small interior towns are feeling this badly. There is a lot of unemployment in all lines at the present time.—*Harper Grain Company, Pittsburgh, Pa. Market letter of December 12.*

OATS WILL BE HEARD FROM

More interest has been aroused in oats, aided largely by the strength in corn. There is no reason why oats should not be good property, especially if corn continues to remain at prevailing prices. Some sections of the country have practically no corn to feed, which will mean a heavy drain on the oat bin, while at the same time a fair sized export business should materialize later on.—*The Urdike Grain Company, Chicago, Ill. From market letter of December 12.*

COUNTRY A FREE SELLER OF CORN

Receipts of old corn are dropping off materially, while arrivals of new corn are moderate at the present time. However, there has been freer selling on the part of the country the past few days, since the big advance in values, and with favorable weather for the movement of corn, we look for considerable of an increase in receipts here. There is no demand to speak of for shipment, but local industries continue to be heavy buyers. In fact, present receipts are hardly sufficient to take care of the daily demand.

Receipts of oats have been light and the country seems disposed to hold. Business for shipment is extremely light, and most of the arrivals are being taken by local feed mills. There is considerable feeding of oats due to the high prices prevailing on corn.—*Mueller Grain Company, Peoria, Ill. Market letter of December 12.*

EASTERN DEMAND NOT KEEN

Receipts of grain in this market during the past month have been very large by lake but very small by rail. The demand in the East is not keen, in fact the territory which draws its supplies from Buffalo has brought less grain and feedstuffs this fall than at any corresponding time during the past 10 years. The eastern consumer is unable to feed grain at present prices and make a profit on the product, therefore the greatest economy is being practiced and cheap substitutes being used whenever possible. While present high prices are very desirable from the point of view of the producer it is a serious question whether it is a healthy condition if the consumer who must pay the higher prices is suffering a loss in so doing. The export

demand may continue great enough to keep prices at a high level but unless the eastern buyer can find a way of getting more money for his product he is going to be a reluctant buyer while present conditions exist and should speculation and export buying let up temporarily, this lack of domestic demand could easily cause a sharp change in the present bullish situation.—*J. G. McKillen, Inc., Buffalo, N. Y. Market letter of December 12.*

CONSIGN NOW

Arrivals of wheat in this market are only small with the demand good for all kinds and we continue to believe that wheat consigned to us now will pay well. We also believe that corn consigned here now will sell at attractive figures.—*Bert A. Boyd Grain Company, Indianapolis, Ind. From market letter of December 12.*

A BROADENING OF TRADE IN CORN

The option markets have shown a little weakness the last day or so which might be expected after the sharp and heavy advance that we have just recently experienced. This, however, does not apply to the cash grain situation. Our local market has been strong and leading most of the markets on spot grain for the past few weeks. This is a good indication and we believe it is a sufficient reason for consignments of grain to this market which will very quickly respond to any advantageous prices that are paid in other markets. Receipts have been barely sufficient to take care of the local feeding demand and there is a considerable broadening of that trade in corn. We believe that this will at any time equal the moderate movement that we are likely to have.

There is a good domestic milling call for all wheat that grades a good No. 3 or better. At these fancy prices the mills are a little discriminating and want only the better grades at the extreme prices. We believe that the market for oats is on a good foundation and that prices will hold about this level or do better.—*H. E. Kinney Grain Company, Indianapolis, Ind. Market letter of December 12.*

BUYERS ONLY TAKING CORN AS NEEDED

The demand for all grains from the territory east of Buffalo has been very light during the past few weeks. The advance in the market seems to have helped the western farmer, but the result is exactly opposite in the eastern part of the country. In the dairy section farmers are in very bad shape, for the reason that, for more than a year it is claimed that they have been selling milk for less than the price of production.

There has been very little corn moved to Buffalo direct from country points in the West, in fact less during November and up to the present time in December than any year that I can recall. On account of the high price of corn buyers are only taking what they need from day to day, which condition I believe will continue, as there are no large stocks of corn east of Buffalo. I, therefore, believe that we will have a steady demand throughout the winter.

The demand for cash oats is very light, especially for No. 3 White oats. Good No. 2 Whites are wanted by the cereal mills and while I do not expect to see an urgent demand, I believe that good No. 2 White oats will be wanted right along throughout the winter months.—*McConnell Grain Corporation, Buffalo, N. Y. Market Letter of December 12.*

KENTON D. KEILHOLTZ AWARDED A CROWN

When Admiral Nelson returned to England, after winning the important sea battle of Trafalgar, the proud Englishmen (they spoke Latin in those days) emblazoned the large arch under which the parade passed with the inscription "Palmarum Ferat Qui Meruit." The press of Toledo recently handed several large bouquets to Kenton D. Keilholtz, one of the heads of Southworth & Co., of the Toledo market and, although they didn't use the Latin

phrase, yet the sentiment was unfolded to the breezes amidst the vociferous acclamations of thousands of Toledoites and assembled grain men, "Let Him Bear the Palm Who Merits It."

The Toledo newspapers were out to show what a young man can do in a land battle where he, figuratively speaking, commands the good ship "Victory." The articles related how Kent was sold to the senior member of the firm of Southworth & Co. many years ago when he faced a group of bankers and told them how he looked at the future of Toledo as a grain market. From that time on he was given responsibilities and when he met them with the best he had, there was no question of the future outcome of the success of the enterprise which he had undertaken.

Kent is among the best known of the younger men in the entire grain trade. He was the youngest man ever elected to the office of president of the Toledo Produce Exchange and his judgment is sought in many quarters. He started in the grain trade at Toledo as sampler and from that passed on to various positions through the portal of office boy. He has been a consistent booster for Toledo and its grain trade and has countless friends, who



KENTON D. KEILHOLTZ

were glad to see the "taffy" handed him by the Toledo newspapers instead of waiting for the "eppitaffy" at the final wind-up.

BETTER INFORMATION NEEDED

Statistics at their best are far from perfect. Estimates of crops are not perfect. Some facts are obtainable and the figures are supposed to be accurate. Grain traders should demand some changes. We speak now of our visible supply. It is now compiled with stocks in store and afloat at 22 primary points and also includes stocks on canals and lakes. The big movement of grain from Duluth to the lower lakes is an important factor. Visible Monday decreased 902,000 bushels. Amount on lakes decreased 971,000 bushels. Fairport and Erie are two points on Lake Erie not reporting stocks. If grain on lakes is put into these ports it disappears out of the visible. Government should compile figures of stocks of grain at ports on the lakes not included in the visible supply. The power of one concern to shift stocks in and out of the visible is not a good thing for the grain trade in general. Large stocks of grain held at such points as mentioned are more important than some stocks reported in the visible supply as now made up.—*C. A. King & Co., Toledo, Ohio, from late special market report.*

GOOD DEMAND FOR WHEAT

Of course, the wheat movement in this direction at the present time is of very light volume although we are experiencing a good demand for all grades, both milling quality and poultry wheat.

We have seen quite an advance in oats recently, both in futures and the relative cash basis. A liberal volume of oats have been booked for move-

ment in this direction and there is a broad outlet here for a good quantity.

Barley is holding its own and up to this time buyers have been taking everything that was offered, particularly of the choicer varieties suitable for malting and pearling.

The movement of corn to Milwaukee has not been of great volume up to this time, but we are looking forward to liberal movement and expect that our buyers will be prepared to absorb it as formerly.—*E. P. Bacon Co., Milwaukee, Wis. Market letter of December 12.*

CHANGES IN MEMBERSHIP

Chicago.—The following memberships on the Board of Trade have been transferred: Wm. T. Hill, George N. Brinkerhoff, Edw. S. Galloway, Estate of Harry M. Neben, George U. Harris, Marvin E. Miner, Alonzo N. Benn, Wm. C. Benstrom, Jas. P. Hayes, Alvah R. Ford and M. E. Veninga. The following were admitted to membership: William C. Engel, James Lyman Crump, Robert Reilly, Henri Cain Bodenheimer, Henry U. Harris, Harry E. Kasdorf, William G. Harke, Michael Espert, Walter H. Cunningham, David T. Fisher and George A. Veninga. A. L. Somers and Edgar C. Knapp have been reinstated. Thomas M. Blake has been suspended. Reported by Secretary James J. Fones.

Cincinnati.—Charles F. Wiedemann of the George Wiedemann Company has been admitted to membership on the Grain & Hay Exchange. Reported by Executive-Secretary D. J. Schuh.

Duluth.—New members on the Board of Trade are: H. W. Hellier and J. H. Riheldaffer. B. V. Loosmore and C. K. Quinn have withdrawn their memberships on the Board. Reported by Secretary Chas. F. MacDonald.

Milwaukee.—Memberships on the Chamber of Commerce have been granted the following: Arthur E. Ladish, Herbert H. Smith, John A. Hewitt, F. A. Kwiket. Memberships transferred are: R. W. Little, Eugene F. Norris, Frank W. Goldie and Theodore Edwards. Reported by Secretary H. A. Plumb.

Minneapolis.—The following memberships on the Chamber of Commerce have been transferred: From W. J. Brown to Clifford M. Strawman; from H. C. Olson to Michael W. Waldorf.

Toledo.—New members on the Produce Exchange are: Chris. O. Wessendorf, Charles R. Keilholtz and F. C. Bowes. Reported by Secretary Archibald Gassaway.

TERMINAL NOTES

A recent sale of a Chicago Board of Trade membership was \$8,600 net to the buyer.

The Neale Grain Company has closed its office at Minneapolis, Minn.

Kerr, Gifford & Co., Inc., grain merchants of Portland, Ore., will establish branch offices at Vancouver, British Columbia.

Meier Grain Company of Salina, Kan., has been incorporated with a capital stock of \$100,000 to do a carlot business in grain and seeds.

Otto O. Stude of Otto Stude & Co., grain receivers and exporters of Baltimore, Md., recently returned from a two months trip to Germany.

The Moore-Seaver Grain Company of Kansas City, Mo., contemplates building a 750,000-bushel grain elevator at Fort Worth, Texas, for storage purposes.

R. A. Summers, formerly connected with the Salina office of the Kansas State Grain Inspection Bureau, is now with the grain inspection office at Kansas City, Kan.

George A. Plummer, formerly associated with Dean, Onativia & Co. of Chicago, has formed a connection with the grain and stock firm of Hornblower & Weeks of Chicago.

A suit of the old Nye-Schneider-Fowler Grain Company of Omaha, Neb., for an accounting from Frank Fowler of Fremont, former president of the company, for \$270,000 of Omaha Printing Company stock, was dismissed recently in the district court at Omaha by Judge Hastings, who said there was

no fraud in the transfer of the stock by Fowler. It was alleged that Fowler obtained the stock through fraudulent transfer of the company's holdings.

J. J. Rammacher, vice-president of the Eastern Grain, Mill and Elevator Corporation of Buffalo, N. Y., spent a few days in middle December visiting the grain trade of Chicago, Ill.

James C. Murray of the Quaker Oats Company of Chicago, Ill., was a recent applicant for membership in the Merchants Exchange of St. Louis, on transfer of certificate from C. A. Lemp.

Lederer Bros., grain commission merchants of Baltimore, Md., have removed their offices from the National Marine Bank Building to the third floor of the Baltimore Chamber of Commerce Building.

Philip H. Schifflin & Co. recently opened an office at Dwight, Ill., with J. F. Grenman in charge. The office is fully equipped with the company's own direct private wire, giving service which, they state, cannot be excelled.

The Basil Burns Grain Corporation at Buffalo, N. Y., has incorporated with a capital stock of \$25,000, to deal in grains, cereals, hay and straw. The incorporators are Basil Burns, M. B. Eaton and L. W. Durham all of Buffalo.

Frank J. Delany, with offices in the Postal Telegraph Building, Chicago, Ill., has purchased the Midwest Elevator at Thirty-fifth Street and Stewart Avenue, that city. He will use it in promoting his general mixed feed business.

The steamer *Jacob T. Kopp* took on 303,468 bushels of wheat at Donahue-Stratton & Co.'s Northwestern Elevator, Milwaukee, Wis., on December 2, to go to Buffalo. This was the largest wheat cargo to leave Milwaukee this season.

W. F. Lagon, who has been an associate of Dr. J. W. T. Duvel, grain futures act supervisor for the United States Department of Agriculture in Chicago, is now in charge of the Kansas City work of the office of Grain Futures Administration.

John W. Snyder, head of the grain exporting firm of Hammond, Snyder & Co. of Baltimore, Md., received the congratulations of his many friends "on Change" on November 24, on the occasion of the celebration of his golden wedding anniversary.

Robert McDougal, grain commission merchant of Chicago, Ill., and former president of the Chicago Board of Trade, has been appointed national counselor for the Board and a member of the United States Chamber of Commerce Committee representing the Board.

The old Board of Trade Building at Eighth and Wyandotte Streets, Kansas City, Mo., is to be called the Manufacturers' Exchange after January 1, when the grain firms now housed there will move into the new Board of Trade Building at Tenth and Wyandotte Streets.

Harris, Winthrop & Co., well-known grain and stock firm of Chicago and New York, with Chicago offices in the Rookery Building, announced that W. A. Putman, formerly with Pope & Eckhardt Company of Chicago, became associated with them on November 15, 1924.

John L. Patten, son of James A. Patten, well-known grain merchant of Chicago, Ill., and member of Bartlett Frazier Co., of Chicago, Ill., has been elected a member of the Chicago Board of Trade. He is 29 years of age and has been identified with the grain trade for some time.

The Board of Directors of the Baltimore Chamber of Commerce has amended the provision in the by-laws, relating to Canadian grain, to read as follows: "All Canadian grain arriving here in bond, shall be inspected in under the grades established by the United States Department of Agriculture."

J. E. Hall was elected chairman of the grain section of the Vancouver Merchants Exchange, Vancouver, B. C., at a late meeting of that body. T. W. B. London was chosen vice-chairman, A. H. Whitmore, treasurer and J. H. Hamilton, secretary. The following firms were admitted to membership:

Bell & Mitchell, Limited, of Vancouver; Wayland-Carolan, of Vancouver and British Empire Grain Company, Limited, of Winnipeg.

It is announced that the Cargill Elevator Company of Minneapolis, Minn., has leased the grain storage at the former Listman Milling Company's plant at La Crosse, Wis., consisting of nine tanks and will use it for oats.

The vacancy caused by the death of Hiram N. Sager in the grain commission firm of J. H. Dole & Co. of Chicago, Ill., will be filled by Frank Haines. Mr. Haines has been connected with the firm for more than 18 years and was elected treasurer and co-manager of the business with George S. Dole at a recent meeting.

The Flanley Grain Company of Sioux City, Iowa, has reopened its Omaha office and is again actively engaged in the grain trade there, with Earl Triplet manager of the branch. The company operates two elevators in connection with the Omaha office, the Flanley Elevator and Merriam & Millard "C" Elevator, both at Council Bluffs.

Williams Simons of Kentland, Ind., formerly engaged in the grain business at Chicago, Ill., met with a very bad automobile accident on the night of December 7. He was standing on the running board of his car when it was side-wiped by another car. His skull was fractured and he suffered from other injuries. He was taken to the hospital at Watseka, Ill., where last reports stated he was resting easily.

John E. Brennan & Co., grain commission merchants of Chicago, Ill., are remembering their friends with a handsome and serviceable wall calendar of ample size, so that the date of the month may be easily read from any part of the grain elevator office. The significance is that any date of 1925 is a good day to ship to this popular Chicago commission house.

The Faroll Grain Company has just been formed at Chicago, Ill., and will operate the 300,000-bushel grain elevator at Schneider, Ind., on the line of the New York Central Railroad. B. Faroll of Faroll Bros., is president of the new company; George J. Le Beau, vice-president; Joe Faroll, treasurer; Walter A. Mooney, secretary. W. F. Hamilton is superintendent of the elevator.

Nisbet Grammer, president of the Eastern Grain, Mill & Elevator Corporation of Buffalo, N. Y., has purchased the Electric Elevator of the owners, Yale, Kneeland and Clark Mitchell of New York, who, it is said, are retiring from the grain business. The consideration was said to be around \$1,000,000. The house has a capacity of 2,000,000 bushels and is one of the modern rapid handling houses of the harbor. The Eastern Grain, Mill & Elevator Corporation also owns and operates the Concrete Central Elevator, which has a capacity of 4,500,000 bushels.

BANK COMMENTS ON TREND OF BUSINESS

The Continental and Commercial Banks of Chicago, in their summary on "The Trend of Business" of December 3 say:

"The statistical story of business, translated into English, is very simple. The volume of trade has been almost as large this year as in the same period of 1923. This month's trade should at least equal the volume of business last December.

"The mis-called 'depression' of the summer was confined largely to manufacturing. There was a big sag in the output of manufactured goods, but a rapid recovery has been recorded. Production is almost at the spring level and should expand gradually as industry feels the backwash from the agricultural revival and recent election.

"The improved position of agriculture is fact, not fiction. It is better than stated in the last number of this summary, August 15.

"The strong banking situation will sustain an expansion of business. It is unlikely that money will become cheaper, but there is no present indication of any tension in the money market likely to hamper business."

TRADE NOTES

The Ellis Drier Company of 1201-1229 South Talman Avenue, Chicago, Ill., was recently awarded the contract for a new 1,000-bushel per hour Ellis Drier for installation at the new Port Elevator at Houston, Texas.

The Weller Manufacturing Company of 1820-1856 North Kostner Avenue, Chicago, Ill., has taken over the Tillottson Company foundry which adjoins its plant. The plant will add to the company's manufacturing facilities and will be used on special lines of machinery.

The B. S. Constant Manufacturing Company, of Bloomington, Ill., was declared insolvent in November and passed into the hands of a receiver. At a meeting of the creditors held in Bloomington December 2 it was decided to operate the plant as a going concern until it could be sold.

One of the convenient devices for the grain elevators is a Climax Scoop Truck manufactured by the Detroit Scoop Truck Company of 993 Osborne Place, Detroit, Mich. It operates on wheels and has a capacity of two and one-half bushels of grain or 200 pounds of coal. Hundreds are in use and demonstrating their utility in grain elevators throughout the vast grain territory.

The Link-Belt Company has just erected a new two-story warehouse and office building at 5938 Linsdale Avenue, Detroit, Mich., into which the Detroit branch has moved from its old quarters on Woodward Avenue. There will be carried in the warehouse, standard Link-Belt and H. W. Caldwell & Son Co.'s products for prompt shipment. Included are various types of chains for elevating, conveying and power transmission purposes, sprockets, and install, maintaining their usual prompt service and shipment.

The Hess Warming & Ventilating Company of 1207-1277 South Western Avenue, Chicago, Ill., has discontinued the making and selling of moisture testers and grain grading apparatus, having sold all their supplies in stock together with good will to the Seed Trade Reporting Bureau, for whom they bespeak the patronage of all their customers in this line. This sale has no reference to the Hess Grain Driers which the Hess company will manufacture and install as usual maintaining their usual prompt service and shipment.

The new elevator erected by the Ralston-Purina Company, at Kansas City, Mo., is equipped throughout with "Ehram" Roller and Ball Bearing Conveying Equipment. The steel trippers for discharging from these conveyors are also provided with ball bearings. It is assumed the use of roller and ball bearings in connection with conveying equipment will materially reduce the power consumption, and make a big saving in labor by eliminating the necessity of frequent greasing as well as requiring less replacements. This equipment was all installed by the J. B. Ehram & Sons Manufacturing Company, of Enterprise, Kan., who have been supplying flour mill and grain elevator equipment of grade and quality to the grain and milling industries since 1872.

Exactly 50 years ago the "Eureka" Smutter, the forerunner of the present day "Eureka" Wheat Scourer, built by the S. Howes Company of Silver Creek, N. Y., was exhibited at Vienna, Austria, at that time considered the greatest of all the great Continental industrial expositions. It is interesting to note that the jury unanimously awarded the "Eureka" machine first honors. The local Silver Creek, N. Y., paper of half a century ago commented upon the distinction in the following words: "The famous 'Eureka' Smut and Separating Machine manufactured in this village by Howes, Babcock & Co., bore off the chief prize at the Vienna Exposition. The language of the award reads: 'This, the highest medal that could be awarded, was given to the "Eureka" in open competition over all wheat cleaners exhibited by English, American and Continental makers.'"



SALE OF CAB STOCK EXCEEDS EXPECTATIONS

Drivers of the Yellow Cab Company, who are selling stock to the public, have been selling the securities much faster than was anticipated, according to an official of the company, in a statement recently. A large proportion of the stock is being sold in small lots for Christmas presents, he said. About 1,000 stockholders were added yesterday with average sales of five shares each.

INCREASE IN DIVIDEND OF C. I. & L.

Chicago, Indianapolis & Louisville Ry. added one-half per cent to the semi-annual dividend rates, bringing the current distribution to 2½ per cent. This constitutes a ⅓ per cent increase added to the dividend this year, as the 2 per cent rate established in June was a ⅓ per cent increase over the previous rate. In addition the regular 2 per cent preferred dividend was declared, payable with the common January 10 to holders of record December 27.

RAILROAD MERGER IS COMPLETED

O. P. and M. J. Van Sweringen, Cleveland real estate magnates in whose brains was born the idea of the great railroad system which would eclipse the most ambitious schemes of the Hills and Harrimans of past generations, are nearer today to the realization of their dream than at any time since the plan was conceived.

As a result of conferences with officials of the Erie and the Pere Marquette lines, the vast consolidation involving railroads worth more than \$1,500,000,000 has before it fewer obstacles than ever before.

PENNSYLVANIA TELEPHONE CAPITAL INCREASED

The proposed increase of \$30,000,000 in authorized common stock of the Bell Telephone Company of Pennsylvania has been approved. Following the meeting directors of the company voted to issue \$20,000,000 of the new stock to present holders of common. All of the common stock of the company is controlled indirectly by the parent company, the American Telephone & Telegraph Company. The increase is merely to capitalize investment in plant and equipment already made. None of the increased stock will be offered outside.

INCREASE IN BANK DEBITS REPORTED

An increase of less than \$100,000,000 in bank debits is reported by the Federal Reserve Board. Debits to individual accounts, as reported to the Federal Reserve Board by banks in leading cities, aggregated \$10,820,000,000, or slightly less than 1 per cent above the previous week. New York City reports an increase of \$34,000,000, St. Louis of \$30,000,000, Philadelphia \$25,000,000 and New Orleans of \$22,000,000. Decreases of \$40,000,000 are reported for Boston, \$34,000,000 for Detroit and \$18,000,000 for Chicago. As compared with the week ended December 5, 1923, debits show an increase of 16 per cent.

PAYMENT ON FRENCH LOAN MADE

J. P. Morgan & Co., who headed a banking syndicate which recently offered the \$100,000,000 French Government 7 per cent bond issue, paid to the Government the proceeds of the financing, about \$94,000,000.

At the time the loan was floated the Government

of France declared that the money would be applied to the reduction of the Government's indebtedness to the Bank of France, which will hold and use the funds as it may deem wise for the protection and stabilization of the franc. The Government's indebtedness to the bank has already been materially reduced since the peak of such borrowings was reached at the end of 1920.

The loan superseded the \$100,000,000 credit which J. P. Morgan & Co., advanced to the Bank of France March 12 for the protection of the franc. This credit, which expired on December 12, will not be renewed.

MAXWELL MOTORS ISSUE ANNOUNCED

The Chase Securities Corporation, Blair & Co., Inc., and J. S. Bache & Co. are managers of a syndicate which is offering for public subscription a new issue of \$3,500,000 Maxwell Motor Corporation first mortgage 5½ per cent serial gold bonds, maturing in equal annual installments of \$350,000 each, from December 15, 1925, to December 15, 1934.

The proceeds of the present financing are to be used to provide in part for the redemption of \$4,750,000 10-year 7 per cent debentures which have been called for redemption on January 26, 1925. The present issue of bonds is being offered at prices to yield 4.75 to 6.20 per cent, according to maturity.

BANK RATE AND WALL STREET

Wall Street has had a case of nerves over the bank rate. Possibly if stocks had been climbing there would have been less apprehension. Possibly the reports of an impending increase that spread through the financial district were mere bear propaganda. Apparently they did not convince the directors of the banks of need for action for they took none. The Reserve bank rate still stands where it has stood for several months. The authorities, in the opinion of conservative bankers, are hardly likely to take premature action. An advance at this time, when the firmness of money is clearly due to seasonal and special influences might be adjudged premature. Wall Street was unduly apprehensive.

TREASURY MAKES PLANS FOR FINANCING

Financing plans of the Treasury for the fiscal year 1926, call for proposed issues of Treasury bonds, notes and certificates aggregating \$1,125,000,000. This would be about \$600,000,000 less than the program for the current fiscal year ending June 30, 1925.

Not more than half of the proposed public debt issues during the coming fiscal year, however, would represent cash offerings if the Treasury continues its policy of refunding at lower rates of interest, the maturities falling due during the next 18 months. Money market conditions have been considerably facilitated by operations in transferring outstanding public debt obligations into new securities with substantial savings in interest charges, while, at the same time, gradually cutting down by redemptions the total of the debt.

POWER STOCK ISSUE OFFERED

A syndicate composed of Pynchon & Co.; West & Co.; W. S. Hammons & Co., and John Nickerson & Co. have purchased and will offer for public subscription a new issue of 150,000 shares of Utilities Power & Light Corporation class "A" stock at a price to be announced later.

Among other companies controlled by Utilities Power & Light Corporation are the Interstate Power

Company and Eastern New Jersey Power Company. Through the subsidiaries there are controlled also the Dubuque Electric Company, East Dubuque Electric Company, Eastern Iowa Electric Company, Electric Light & Power Company and Jamesburg Electric Company. The companies in the system operate in the states of Iowa, Minnesota, Wisconsin, Illinois and New Jersey. Over 275 communities are furnished with electric light and power, gas, steam heat, water or electric railway service, over 90 per cent of the net income of the properties being derived from the sale of electric light and power.

The capitalization of the Utilities Power & Light Corporation upon completion of the present financing will be \$10,000,000 of 7 per cent cumulative preferred stock authorized of which \$1,000,000 will be outstanding; 1,550,000 shares of class "A" stock without stated par value authorized, all of which will be outstanding, and 300,000 shares of class "B" stock without stated par value all of which will be outstanding.

The physical properties of the corporation in Minnesota, Iowa, Wisconsin and Illinois are being interconnected.

BONDS FOR MARCH REFUNDING

Secretary Mellon expects to refund a large proportion of the Government securities maturing on March 15 with the new Treasury 4 per cent bonds, it was said today at the department. Officials stated that subscriptions to the bond issue on the basis of exchanges for maturing securities were coming in very satisfactorily.

The large oversubscription to the \$200,000,000 cash offering of the new bonds, in Mr. Mellon's opinion, should not be construed as indicating that there is a large supply of idle money available in the market. Most of the subscribers to the cash offering, it was explained, put in for two or three times their actual wants, expecting the allotments to be scaled down, which runs up the total of the cash subscriptions received. If the Treasury should accept all the cash subscriptions received for an offering of its securities it would stagger the financial world, Mr. Mellon believes.

MARKET OPINION

Stein, Alstrin & Co.

While stocks have staged a strong comeback and look higher, we would await definite indication of their ability to break into new high ground before concluding that the recent reactionary move has been completed.

Dean, Onativia & Co.

We look for a continued good market with considerable activity, interfered by the natural reactions until near the end of the year when the normal irregularities arise.

Thomson & McKinnon

The all-important point at the present time is not whether we are to have a bull market. We have it, and it is very likely to continue. The real problem is how to keep the market orderly and prevent severe and unnecessary breaks. This can only be done by everyone pursuing a comparative policy and a readiness to sell some stocks on bulges rather than to increase commitments.

J. S. Bache & Co.

Careful selection must still be the policy to insure safety in stock market operations.

Harris, Winthrop & Co.

We feel that the market is headed for a higher range of prices and that while there will be reactions from time to time they will be comparatively small and but temporary. The railroads seem to be in for a period of prosperity and we are most favorably inclined towards these securities.

Hornblower & Weeks

The general speculative position, meanwhile, calls for caution in anticipation of another reactionary movement and the policy of buying only certain special stocks for the time being.

James E. Bennett & Co.

As a general proposition, we continue to suggest the acceptance of profits on these sharp bulges and the awaiting of a good break to reinstate. Oils can well be bought around current levels.

How Hedging Helps Farm and Commerce

Hedging Classed As An Insurance for the Elevator Operator Against Possible Losses and an Economy to the Public

By FRANK L. CAREY*

SUDDEN collapse of all grain hedging facilities would bring economic turmoil. At least temporarily the disturbance would be worldwide. Such has become the importance of the grain hedge.

When a man desires to protect his place of business against fire he places the risk with an insurance company. In like manner the owner of grain, aware of the many risks of such ownership, safeguards his position by use of the hedge. Grain marketing is an involved subject and consequently the cause of much confusion. A study of congressional or legislative records will indicate the general lack of grain marketing knowledge, particularly regarding the subject of hedging. To have hedging facilities there must first be a futures trading market where contracts for the future delivery of grain may be bought and sold. To have a futures market there must be speculation. The grain futures market as it now functions harnesses this speculation and makes it serve a public good.

Briefly, then, speculation makes possible a futures market, and a futures market provides the facilities for the hedging of grain. The manner in which a hedge is executed is quite simple. For example, a country elevator buys grain from a farmer. The elevator plans to ship this grain later on. In the meantime it must have protection against price swings.

So when the elevator man buys the farmer's grain, or soon thereafter, he sells an equal amount of grain in the futures market. When he delivers the physical grain he buys the same amount back in the futures market, thus rounding out his hedge.

During the period of ownership had the price of grain gone down, the elevator man would have made a profit on his futures trade, sustaining an equal loss (or nearly so) on the actual grain. Had the price gone up, he would have made a profit on the actual grain and sustained a loss on the futures contract. In either case his ultimate profit—that usually made by the country elevator—would have been practically the same. Whether prices went up or down was a matter of no concern to the owner of the hedged grain.

Millers, cash grain merchants, exporters and others use the hedging market in the same manner as a means of financial protection. The exporter, for instance, will contract to sell grain abroad before he has purchased the actual grain. He buys in the Chicago market for future delivery an amount equal to his sale. The price will enable him to set down the physical grain abroad at a profit. A rising market will not disturb him, for he is safely hedged.

Risks are not eliminated when the elevator man hedges his purchases or when the exporter hedges his sales. Risks can never be wholly eliminated. But they can and are shifted to the futures market and spread among those whose business, like that of the insurance company, is to assume risks. It is by virtue of this system of commercial price insurance that grain commerce has reached its present unsurpassed state of efficiency.

To the farmer, hedging facilities perform an invaluable service. They make possible prices for his grain. Let us suppose there were no hedging facilities, no futures market. It would be impossible, therefore, to determine exact values. There would be no way of registering world supply and demand. Each man who went out into the country to buy the farmers' grain would determine his own price. It would be based not upon actual conditions but largely upon personal opinion. The buyer of the farmers' grain would have to assume all the risks that are now shifted to the futures market. He would know beyond the shadow of a doubt that unforeseen conditions would constantly arise and

cause wide fluctuations. He would know, too, that these swings would from time to time result in losses. It would be poor business to bear the burden of all these losses. So in purchasing the farmers' grain, sufficient deduction would be made to place at least part of the inevitable losses upon the farmer. In other words, a lower price would be paid to the grower and the extra margin used to care for anticipated reverses during the period of ownership.

Contrast this with conditions of today. When the farmer sells his grain he knows its value in the world market. There is no argument over price. The futures market voices the composite world opinion every minute of the market day. There are no deductions for possible losses, for the hedging facilities of a broad, liquid market quickly absorb the risks. So the farmer receives full value for his grain and may sell it instantly in a highly competitive world market.

Hedging facilities of the futures market, permitting as they do delivery of definite quantities of



FRANK L. CAREY

grain during specified months, tend to equalize prices throughout the year. Instead of uniformly low prices at the great harvest movement period and high prices during the low crop-movement months, there is more of a balanced crop-year price than would be possible under any other method. This crop-price, except under extreme conditions, practically places a uniform value on grain from harvest to harvest, allowing only for the cost of storing and handling.

Hedging benefits the public because it narrows the dealer's margin of profit, thus increasing the price paid the farmer and reducing the price paid by the consumer. Absolute proof of such conditions may be found by comparison with articles that are not hedged. Hay and seed, for example, cannot be hedged and the dealer's margin is three to five times greater than on wheat or corn.

Incidentally, the margin of profit on grain in the United States is lower than in foreign countries where hedging is not practiced. Moreover, the spread between producer and consumer is smaller than that existing in any other stable food product.

Vital importance of hedging is constantly being demonstrated. It is interesting to consider the situation during the spring and summer months of 1924. Tremendous uncertainty prevailed. While foreign crops were reported bad, these reports would not have registered to the full advantage of the American grain grower without the broad competitive futures market. Farmers as well as

distributors and consumers would have been in a quandary and prices undoubtedly would have remained sluggish without the speculative support of the futures market with its price-registering machinery and its hedging facilities. Right in the heart of the huge crop-movement period, however, the futures market functioned with admirable smoothness, absorbing all offerings, and prices continued rising in a normal, natural manner with supply and demand constantly adjusting values. It was a high tribute to the hedge. No more striking proof of the systems benefited could be possible.

Perhaps the only facility lacking to make an ideal market during that strenuous period was trading in privileges. It is to be regretted that this form of insurance has been eliminated through ill-advised legislation which should be repealed. Privileges would have proved an additional aid to the market. By use of privileges exporters and others are further enabled to safeguard their holdings. It is a very useful form of overnight insurance which permits buying in larger quantities, a most important factor during crop movement when strong market support is needed.

Privilege trading stands the test of sound banking, because it is another protective measure and price stabilizer. The trade earnestly hopes to see a resumption of such trading in the near future. Under futures trading and hedging, grain is almost money. It has an immediate cash value. The gigantic sums loaned by banks on grain would not be available except for the hedge. Banks are too cautious to risk the financing of unhedged grain. But they advance millions under the present system of marketing and many banks are themselves members of the grain exchanges.

In creating a market for trading in cotton futures contracts the Chicago Board of Trade was influenced chiefly by the widespread demand in the world of commerce for further extension of hedging facilities. It has been demonstrated that every line of business, the products of which lend themselves to futures trading, becomes more stable when a broad, liquid futures market is made available. It follows too that everyone interested in those products, from producer to ultimate consumer, is distinctly benefitted, for then commerce is enabled to proceed on a sound basis with the usual risks reduced to a minimum. The importance of hedging cannot be exaggerated.

IMPROVEMENT IN WHEAT SITUATION

Improvement in the wheat situation has been the outstanding event in the agricultural history of 1924, the report of the late Secretary Henry C. Wallace, as reported to the President by Secretary Howard M. Gore, declares. As the year began the world grain market situation was more favorable than at any time since the general price deflation of 1920-21. Apparent surpluses of bread grains had been much reduced and the world's crop promises to be between 300,000,000 and 350,000,000 bushels below that of last year. Exportable surpluses in the principal producing countries were reduced and requirements of the importing countries were increased. Indications were that wheat would continue throughout the crop year on a price level considerably higher than that of the crop year of 1923-24. Total production of wheat in the Northern Hemisphere outside of Russia and China was estimated to be about 2,750,000,000 bushels, compared with 3,045,000,000 bushels last year. Russia seemed unlikely to export wheat, whereas last year she exported about 25,000,000 bushels. Wheat crops of the Southern Hemisphere were estimated not to be larger than those of last year. The world rye crop, an important factor in the world wheat market, was approximately 100,000,000 bushels short of last year. It is figured that the total world's supply of bread grains for 1924-25 will be probably 10 per cent less than that of the preceding crop year.

The demand for wheat from the United States, the report says, should be stronger than it was last year. Europe, outside of Russia, is short more

*This is the last of several articles, released from time to time, in which President Carey, of the Chicago Board of Trade, discussed various phases of grain marketing.

than 100,000,000 bushels of wheat and approximately 100,000,000 bushels of rye. North Africa and Russia are out of the market. Canada, our most important competitor, will have at least 150,000,000 bushels less wheat than last year. High prices may result in lessened consumption of wheat in importing countries, but Europe and the Orient together will undoubtedly take all the wheat available for export from the United States at prices considerably above those of a year ago.

Nature has been good to most of the wheat farmers of the United States this year. She has

given them large yields per acre and a total crop larger than that of last year on a reduced acreage. Reduced yields in foreign countries have brought about a market situation in which the American farmers are receiving higher prices for a larger crop. It seems reasonable to expect that the price farmers will receive for this year's crop will average about \$1.15 or better for the year. At this price the cash income from the wheat crop, as estimated October 1, would amount to about \$800,000,000, compared with approximately \$570,000,000 last year.

Buying Wheat on Federal Grade

Events Leading Up to Grain Standardization and How the System Works Under Practical Test

By F. E. WATKINS*

WHEN I opened my files on the subject of grading, I became so interested in reading up and renewing old memories that I almost forgot to get down to the topic itself. In other words, I needed some kind of an impulse to press me on. Somewhat like the colored man who said, "Sister Jones, I am raising a fund for our dear pastor. He is going down to Mobile to take a new pastorate, and we thought we would go together and give him a little momentum." To get away from the history and down to the real thing.

But coming to a few of the points I want to leave with you—I would like to touch a little on history. We did have a system—although perhaps there are men here who may not be aware, we were not always operating under the present system of grading grain. It was a system that worked more or less haltingly, and, in the language of the street, don't let anybody tell you different, but influences worked against that system of grading. I have listed them as about three:

In the first place, in the Northwest there was a considerable amount of complaint in regard to the grading of wheat. This dissatisfaction culminated and was personified in the person of Senator McCumber, who, you may remember, came down to Washington firmly determined to have voluntary grading of grain. I want to come back to that before I finish. I will hasten along, because the hour is late.

The second influence, a foreign demand for a change in our grading system. I have copies of letters dated in 1907, from the European International Committee—proposals on corn. It got to such a point, they practically said, we won't take any more American certificates on corn, and demanded that something be done. As this correspondence shows, something was being done at that time. In 1907, as you recall—I have here a pamphlet on Grades of Grain adopted at the Uniform Grades Congress, held in Chicago, December 11, and 12, 1906, and on the back of this pamphlet is a roster of the men: Presiding officer, J. W. McCord of Columbus, Ohio. An interesting list, but I won't read it all. Mr. Burk, president of the Millers National and R. S. Johnson, Knoxville, Mr. Culver of Toledo, pioneers in this work at that time. Mr. John D. Shanahan, expert in charge of grade standardization, was there in 1906. The second conference was held June 21, 1907.

In 1908 there came into very definite existence what was known for many years as the Grain Dealers National Association's Grading Rule, and those rules became more or less the basis for the grades which were later promulgated in the Grain Standards Act. We went along in this way until 1913, when passed the first copy of tentative grades of grain, and I remember something about it because I happened to be chairman of the Grades Committee of the Grain Dealers Association. These were the first grades that came out, and I notice a discussion there, "Can they be enforced?" That was still three years ahead of the passage of the Act.

This shows in columns, first the tentative grades of grain formulated by the United States Department

of Agriculture, and tentative grades adopted by the New Orleans Convention, and the uniform grades of grain, now generally in use, known as the Grain Dealers National grades.

Now, coming down to the year 1916, was signed the United States Grain Standards Act, under which we are operating at the present time. That



F. E. WATKINS

gives us a little idea how these grades came about. It was a gradual, steady growth.

The third influence was this—an effort within the trade.

We are getting a uniformity of overhead without an entire uniformity of price. It is true that the country as a whole, or pretty largely, is looking more or less askance at the grading of markets. They accidentally overlooked the fact that there was an investment of machinery and there was always somewhat of a suspicion which it was not always possible to overcome, and sometimes the reply was a little like that of a suspicious character who was hauled into an English court for stealing who asked, "What am I supposed to have stolen?" They said, "A horse and wagon." He said, "Search me." So, it has been a little hard to find out whether grading is being worked in the terminal markets or not. When the Grain Standard Act came out we were all alarmed, but we knew more or less we were going to be compelled to work under it, and that brings us to the subject of buying grain on Federal Grades.

Of course we are interested in wheat largely for today's discussions. Why buy grain on Federal grades? That could be answered very briefly, if asking a terminal market, almost as briefly, as the little girl replied in that story of Elisha: "Elisha had a bird, and the children kept teasing him, and

he said if you keep on teasing me, I will fling my bird at you, and they did, and he did, and the bird did."

So, if asking the terminal market, I would say because we are compelled to buy by them. There is no recourse or possibility of doing anything else. That law applies equally on purchases at country points. I assume I am talking to men who are buying grains at points at which there is not a regularly constituted inspection. It is a difficult thing and costs a great deal, as any of you men know who have been in a grain laboratory and know what it requires to test grain, and you say, how can you buy on grades and why buy on grades?

In the first place, the old rule still obtains, and while this would be a good place to preach a sermon, I am neither a preacher nor teacher; as to whether it is good business. I repeat that you should buy grain by grade. Is it fair to your farmer customer not to do so? Is it not true if you have a customer who raises a good crop of wheat, good quality and clean, and brings it in, and you buy that for the same price you do poor wheat, are you not putting a premium on poor farming? I am not speaking entirely without experience, because we have had as high as 23 or 24 country stations. Thank God, we haven't any now, but I have been up against these problems and know whereof I speak, and it isn't easy to deal with your farmers each by each all down the line and buy grain in accordance with the quality set out, but you can try, as far as you are able to do that thing.

Third, is it fair to yourself? Of course, your situation is a little bit different from the grain dealer. He has to reship his wheat. Most of it goes to a terminal market, where it is going to be thoroughly graded, and the only chance is to make your margin wide enough to break even or buy it exactly in accordance with its quality, and the feed prices will take care of the difference.

This might be a good place to bring up the matter of dockage, which all like to hear about and would like to be rid of. I have heard this said, within the last two weeks, "Why don't the Government do something about dockage?" The Federal Act does do something. They have deliberately penalized dockage, and I know the attitude of the men drawing up this law and the regulations under which each put the law into effect and their intention to try and keep the dockage where it belonged. Now, of course, here in Ohio all of you do, but in such benighted states as Kentucky, and some others, they do not.

I presume you are familiar with the figures put out by your National organization on the crop of 1922. It was estimated that the farmers of the Northwest shipped in the crop year over 7,500,000 bushels of dockage and used for this purpose about 5,800 cars. In addition it is estimated in 1922, the farmers in Minnesota, North Dakota, South Dakota and Montana, paid a tremendous sum for freight on this dockage, and of course, with them dockage is a much more serious problem than it is down here where by contact of dealing we know the farmer that has clean wheat. There is a fallacy about sending dockage to market. I can assure you the elevators of this country are not getting rich on dockage. The return is no more than sufficient to pay for taking care of it.

There is another element just now which is coming into the grading question, which is not bothering you, but it is a serious problem in Kansas and Nebraska and that is the protein test. I attended a Kansas City convention and that was the live topic. In fact they had a man from the state laboratory making a protein test and after all was done he had to admit there was a great deal of uncertainty about a protein test, and some sample might be taken over and another test made with another result, and you see that opened up a lot of trouble.

If bakers are going to insist on flour with a certain protein content, it is going to add another burden to our handling of wheat which I think we all would be glad to be rid of, but I am not enough of a scientist to know much about that.

*From an address delivered before the Ohio Millers Association at Columbus on November 19.

There is another fallacy with regard to grading that the Northwest has, and that is that grades establish value. They do not absolutely. After you once test a grade and set out its terms, he says I will get wheat on grade and he looks at the wheat and samples and buys it on that basis.

Now, I would like to make just one more point in regard to the present system of supervision under this Federal Grade Standards Act. If the last election had any significance at all it certainly was a set back to the bureaucratic idea, and for that we can be thankful. I have felt for several years, because this has been under my observation more or less of necessity, that we were not so far removed from the old idea of a straight out Federal grade, and that might mean most anything; it might mean an inspection at your mill door, and when you get started in a thing of that kind, it never stops and Lord help the grain trade, if you have to have that system. If Federal inspection now is not entirely satisfactory and does not eliminate all the differences, it certainly has improved conditions very much from 10 years ago, and if it is not quite perfect and not accomplishing everything, let us not throw that away until we know where we are heading. In any event, let us not bring about anything that will invite the Government any further into our business from any angle whatsoever.

FORT WORTH MARKET BREAKS RECORDS

Decided increases in receipts and shipments of grain have been noted at Fort Worth, Texas, in the last year. Wheat and corn have been noticeably heavy. Leo Potishman, of the Transit Grain & Commission Company, of that city, and who is also chairman of the Exchange Committee on Public Relations, recently discussed the increases. He made no calculation of the estimated value of the grains moved through Fort Worth because of market changes during the period represented. He said, however, in part:

"You might get some idea by figuring that a year ago we were paying \$1,200 for a car of wheat and now we are paying around \$2,000."

During the last 11 months Chief Inspector V. L. Nigh reported 29,310 cars of grain inspected, as compared to 16,399 cars for the same period last year. Oats, hay, barley and snap corn showed marked increases. The force under Inspector Nigh has been more than doubled and every day the trade has been informed on the grades of the cars of grains received and shipped out. During November, 870 cars of wheat were received, 402 were shipped out as against 382 received in November 1923 and 174 shipped out. The increase in the business handled in the wheat division alone was 488 cars.

TECHNICAL WHEAT CIRCULAR ISSUED

Crude protein content has become an important factor in establishing the market value of certain classes of wheat. Premiums of several cents a bushel have been paid for each additional per cent of crude protein contained in the wheat above an agreed percentage. Ash content also is an important factor in marketing flour.

In considering these factors very little attention has heretofore been given by the trade to the moisture content of the material for which specific protein and ash values are given. This practice, says the United States Department of Agriculture, leads to misunderstandings, confusion, and irregularities, which would be avoided if these factors were reported on a uniform moisture base.

Tables for converting crude protein and ash percentages of any given moisture content to a 13.5 per cent moisture basis have been prepared by the Department of Agriculture and published in Miscellaneous Circular No. 28. The tables in this circular can also be used for conversion to a moisture-free base if so desired.

The tables should be found useful to grain buyers, grain inspectors, bakers, and to cereal chemists engaged in making determinations for these factors. Copies of Circular No. 28 may be obtained by writing the United States Department of Agriculture, Washington, D. C.

OLD ELEVATOR STILL OPERATES AFTER MILL IS GONE

By C. HYDE

For many years the elevator in the college town of Albion, Mich., was called the "Albion Farmers Elevator." It was one of the largest buildings on Main Street, having been built 25 years ago. It was a three-story elevator, and the mill for which it was erected was built in 1845 by the millwright Cole. The site of the mill is now occupied by the local bank.

In September, 1923, the elevator was taken over by a stock company, the Albion Elevator Company, which is composed of about 100 members, most of whom are either citizens of Albion or farmers in the immediate vicinity, though one of them lives as far away as California. The new owners moved the elevator back to the center of the city block, to make way for newer buildings in its place, and thus the progressive generation crowded out the older. The prosperous busy college town of 9,000 inhabitants is a far cry from the little village in which the elevator originally stood, and the mill



THE ALBION FARMERS ELEVATOR, ALBION, MICH.

is gone entirely. However, in a good grain country, such as that in which the elevator is located, it still has excellent financial opportunities.

The house has a storage capacity of 60,000 bushels, divided into 10 bins. The receiving capacity is 100 bushels per hour and the clipper cleaners have the same capacity. There is one corn sheller, also 100 bushels' capacity, and one Sprout & Waldron Attrition Mill with a capacity of three tons per hour. Four scales are in use, and adequate fire protection has been installed. The elevator handles wheat, rye, corn, barley and oats, as well as twine and oil. The total number of bushels handled annually is estimated at 60,000 bushels.

A NEW ELEVATOR FOR HALIFAX, N. S.

By C. H. BROOKS

Final revision of plans, specifications and costs for the Halifax Grain Elevator, Halifax, N. S., are in hand and will be rushed through to completion. The proposed capacity for the new elevator is to be one million bushels. This important news has been received by Hon. R. S. Finn, M. P., and is in accordance with final advices received by him from Hon. T. A. Low, Minister of Trade and Commerce, as a result of his insistent demands that the policy of the Government in this respect should be fulfilled without further delay. Three weeks will be the time limit for the reception of tenders, Mr. Finn said, thereby making possible the awarding

of the contract by the first of the year. The immediate starting of the construction can be assured by the fact that the excavation necessary for the erection of this large structure will be almost out of rock, and the work will be of such a nature that it can be carried on during the winter months as well as any other season of the year.

The John S. Metcalf Company of Montreal, consulting engineers and experts in grain elevator construction to whom the Minister of Trade and Commerce submitted the entire project, have assured the Minister that there will be no delay in the revision of the plans, specifications and estimated costs—the original plans and specifications having been prepared some time ago—and they are rushing them to completion. In the meantime they will have the full co-operation of the Canadian National Railway System, and the Minister has impressed upon the consulting engineers that they should obtain full approval of the plans by C. B. Brown, Montreal, chief engineer of the Canadian National System.

The new elevator will be of the latest fire-proof construction thus affording shippers a safe storage capacity for their grain free of high insurance rates which now obtain against the storage of grain in Halifax with its present inadequate and obsolete facilities.

INTERIOR FIRE PROTECTION

The probability of a fire is something which the miller and the elevator operator dread. The Mutual Fire Prevention Bureau, in a recent bulletin, states that two out of every three fires reported to it are put out with small loss by the use of water barrels or fire extinguishers. Many of the total losses could have been prevented if the apparatus had been adequate. Winter is now approaching and with it the additional hazard of frozen fire extinguishing equipment. The Bureau recommends the use of non-freezing solutions, and constant care of all fire fighting equipment in its "Fire Prevention Equipment Maintenance Chart" which follows:

Water Barrels and Buckets

To make a non-freezing solution, common salt may be used. Four pounds of salt per gallon of water should be used. However, calcium chloride is preferable to salt because the mixture does not become foul. The calcium chloride (commercial 75 per cent) should be mixed with water, according to the temperature, as per the following table:

In climates where the temperature does not go below	Pounds of Calcium Chloride for each Gallon of Solution
18 degrees ABOVE zero.....	2 pounds per gallon
Zero	3 pounds per gallon
10 degrees below zero.....	3½ pounds per gallon
18 degrees below zero.....	4 pounds per gallon
40 degrees below zero.....	5 pounds per gallon
60 degrees below zero.....	6 pounds per gallon

All that is necessary is to put the calcium chloride into the water, stirring it frequently until it is all dissolved.

Calcium chloride does not rust metal, yet it has a tendency to attack solder; so if metal cans are used, about a pound or more of lime should be added to each can to overcome this tendency to destroy the solder.

Soda and Acid Extinguishers

The soda and acid extinguisher should be protected against freezing. It should also be discharged, cleaned, and refilled once a year.

Pump Types of Extinguishers

All of the one and two quart pump extinguishers require testing at least twice a year. The nozzles tend to corrode and the pumps to dry out and become inoperative. The carbon tetrachloride, which is the chemical used in these extinguishers, sometimes evaporates leaving the extinguisher empty or only half full. To test the apparatus simply take a short stroke of the pump, and if the stream is strong and full and weight indicates a full extinguisher replace plunger in closed position.

OFFICIAL reports on crops indicate that Poland may be definitely eliminated as a source of cereal supply to neighboring states, and may even be compelled to import a fair quantity of breadgrains.

DUST REMOVER AND CLEANER REDUCES HAZARD

The importance of keeping dust down and getting it eliminated whenever and wherever possible has been emphasized repeatedly: The insurance organizations have stressed the point and numerous fatalities have brought the dust hazard to constant attention. Recently the manufacturers of the Dowdall Dust Remover and Cleaner, in Oberlin, Kan., have demonstrated the effectiveness of their machine in this connection.

In removing the dust from the pit and the head of the elevator, it acts before the dust has time to circulate, thus making it possible to clean the pit or work in it during the process of cleaning the elevator without extra cost and while all other elevator machinery is working. It raises the grade of the grain and eliminates dockage at the terminal.

A 30-inch steel plate exhaust fan throws a current of air through the grain at the rate of 90 miles an hour; so that damp grain may be dried by the use of the Dowdall. The air is drawn from the pit and acts on the grain from the moment it leaves the pit until it goes to the scales. The legs are sealed air-tight. One elevator, according to the manufacturer, reports having bought practically all the damp wheat which came into town, and to have raised the price, thus helping to pay for the cleaner in a short while.

A separator which eliminates sticks and foreign matter of lesser weight than the grain at the same operation is another feature. This is piped down to the working floor to be disposed of by the operator as chicken feed or some other suitable way. The amount of air put upon the grain is controlled from the working floor, and can be regulated to suit any kind of grain. While the sticks and lighter weight grain are piped back to the work floor, the dust is set free at the top of the elevator outside of the building.

An extra pulley and counter-shaft in the cupola, or a motor, may be used to run the cleaner and three to five horsepower is required. A steel spreader-board to scatter the grain as it is thrown from the buckets at the top of the elevator legs makes the dust removal, grain drying and grain separation all possible at one operation and at one time. The cleaner has no moving parts except the propeller shaft or fan, and when once installed should work and last indefinitely. It is made of steel throughout and is guaranteed to do what is claimed for it or money will be refunded after 30 days' trial.

WHEAT IN PENNSYLVANIA

Pennsylvania is distinctly a Winter wheat state. In a test to determine the relative merits of different small grains as a crop Spring wheat yielded only 11.9 bushels per acre, testing 56.3 pounds per bushel. This made a product of only 714 pounds per acre. Oats, barley and emmer yielded under similar conditions from 50 per cent to 300 per cent more. On similar soil most varieties of Winter wheat in Pennsylvania have averaged over 30 bushels per acre.

Of beardless varieties of Winter wheat recommended by the Pennsylvania Experiment Station are Harvest King, or Poole and Leaps Prolific. A bearded wheat, Pennsylvania 44, a selection of Fulcaster, is a bearded variety and is a new wheat which has been recommended on account of its high yield. In nearly 100 tests by farmers in 1919-22, this new wheat led others by 5.7 bushels per acre, as an average. Red Rock is a good yielder and is recommended by the station on account of its breadmaking qualities. Like Pennsylvania 44, it is a bearded wheat.

WHEAT FACTS

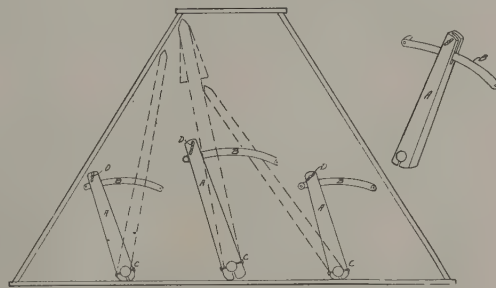
Wheat is extraordinary in the range of its cultivation. It can be grown north of the Arctic Circle and almost under the Equator. In Mexico it grows at the sea level and up to an altitude of 10,000 feet.

Humboldt says that it grows in Tibet at an altitude of 14,000 feet and more. So long as winter temperatures do not fall below 4 degrees below zero (Fahrenheit) and the air and soil are dry, the exposed plants suffer but little. As regards moisture, an annual rainfall of from 20 to 30 inches is sufficient although some of the Durum and Club wheats give good results where the rainfall is not more than from 12 to 15 inches per annum.

The world's average yield is 13 bushels per acre. Contrary to current beliefs, the average yield has been increasing the past few centuries. In the Seventeenth Century in England, the yield per acre was only 10 bushels per acre, while the yield the first 20 years of the present century averaged 31 bushels in England. Two well-attested phenomenal yields of wheat were 96 bushels per acre at Wye, England, in 1918, and 117.2 bushels per acre in Island County, Washington, in 1895.

A FOUR-WAY VALVE

The diagram shows a four-way valve which can be used on feed and which will give excellent satisfaction. The device for switching and securing the valves is made by boring a hole at the



bottom end of A, and then the end is split out as shown. C is a stove bolt running through A and one-inch pipe. Saw down through A at the top end enough to receive B, which is No. 18 galvanized iron. D is stove bolt and wing nut.

BIG INCREASE IN SOYBEAN ACREAGE

The acreage of soybeans grown for the grain in the Northern States, where the crop is rapidly gaining in favor, has increased about 25 per cent this year. The total United States acreage grown for the beans, rather than for forage, this year is estimated at 534,000 acres compared with 452,000 last year.

Land planted to cowpeas for the peas has been greatly decreased, the present area being 910,000 acres compared with 1,218,000 acres last year. Velvet bean acreage shows a slight reduction to 583,000 acres compared with 601,000 acres last year.

EXPORT TRADE IN GRAIN*

In discussing the shifting of risk through hedging, the theorist is prone to ignore the effect on futures prices of the execution of hedging orders, although this is often a serious obstacle to successful hedging. Any hedge sale or purchase put through the pit tends to bring about a price movement adverse to the hedger, and when the market is dull the change may be pronounced. There are times even in Chicago when 10 purchases of futures of 10,000 bushels each, made to cover a sale of 100,000 bushels of cash wheat, will cause an advance of $\frac{1}{2}$ cent or more between the first purchase and the last. Whatever the advance in such a case may be, it reduces to that extent the exporter's margin in the cash transaction. A similar condition may exist when a "fobber" attempts to cover a purchase of cash grain by selling futures. In other words, our contract markets are too narrow for the most effective hedging. This is particularly true of the smaller markets and in periods

when trading is dull. A point that the grain dealer must observe in hedging is so to execute his orders as to cause the least disturbance in the price level. Another point is to select the futures market in which the price at the moment is the most favorable; that is, placing a hedge purchase he desires to operate in the market in which futures in relation to cash grain values are the lowest, and vice versa. The necessity of keeping hedges advantageously placed leads to much switching of hedges—in other words, to transferring a hedge purchase from one market to another by selling in the market in which a purchase has originally been made and buying again in another market. To keep abreast of his competitors, the exporter must constantly watch all the important markets and spread his hedges from this market to that in order to make the most of any price movement that may be utilized to increase the measure of protection obtained from futures contracts.

An aspect of hedging that is too obvious to require extended description is the protection it affords the grantor of a loan on a commodity carried under a hedge, for, naturally, whatever degree of protection the owner of grain secures by hedging is enjoyed also by the banker who has extended credit on the security of the grain. Though, as has been pointed out, the protection so secured is far from complete, it is sufficient to induce bankers to loan much more freely against hedged stocks than against stocks that have not been safe-guarded in this way.

The consensus of opinion among American "fobbers" and exporters upon the extent to which hedging is practiced is expressed in the following statement of a prominent "fobber" and exporter:

We operate entirely under hedges. We put out our grain limits (bids for wheat) every evening in the country, and we put out our cable offers abroad at the same time. If at the opening of the Chicago market we have no acceptances from Europe, we immediately sell futures in Chicago against whatever grain we may have purchased overnight. The same applies to cable acceptances, for if we receive foreign acceptances and have purchased no grain in the country, we immediately buy futures in Chicago, holding them until such time as we have been able to buy the actual grain, when we take in our hedges.

The following appraisal of the value of hedging in export trade has been given by Sir Herbert T. Robson, head of the grain firm of Ross T. Smyth & Co., of London:

I am most emphatically of the opinion that the hedging methods employed in North America, by the use of the Chicago and Winnipeg markets, are the most efficient and economical methods employed anywhere in the world. You will, perhaps, recollect that my own firm, Messrs. Ross T. Smyth & Co., have or have had, agencies in every exporting country in the world. Our experience in these exporting countries, other than America, is that immediately after harvest, when the pressure of the new arrivals of grain is most keenly felt, there has always been a heavy depreciation in the relative value of that grain from other countries. For instance, I have known Indian wheat immediately after harvest to sell at as much as 1 shilling per cental below the price of No. 2 Hard Winter wheat, although it is White wheat and contains as a rule 9 per cent of moisture, and is presumed to be intrinsically worth more than Hard Winter wheat. I have known the same sort of Indian wheat to be sold later in the season at 5 pence per cental over the price of Hard Winter wheat.

Experience shows that where there are no hedging markets, wheat which is marketed immediately after harvest is often so freely pressed for sale that the exporting merchants are not able to buy it in sufficient quantities to hold it themselves, so as to take up all which is pressed for sale, and in consequence it is forced on to consuming markets at heavily depreciated prices. This used to be particularly noticeable in Indian and Russian wheat. In the River Plate, option markets are used to a certain extent by the merchants and shippers for purposes of hedging purchases made in the interior, and as a result it is usual to find the River Plate wheat is not so violently depressed immediately after harvest as is the case with wheat dealt with in countries where there are no hedging markets.

I emphasize the point that outside America, and to some small extent in the River Plate, all grain is held by dealers, merchants, and millers in a speculative manner. It is not generally hedged by sales of options. It is because of this speculative holding of grain that it is impossible to say what margin of profit the merchant or shipper gets. The margin which he aims at is a purely speculative margin. He buys because he thinks grain is cheap and waits to sell it when it is dearer; or he sells because he thinks it is dear and hopes to buy later when he thinks it is cheaper.

[To Be Continued]

*The results of a survey by the Department of Commerce, on the methods and possibilities of shipping grain abroad, continued from Page 352, November AMERICAN GRAIN TRADE.

NEWS LETTERS

DULUTH

S. J. SCHULTE - CORRESPONDENT

THE last days of vessel loading before the close of navigation on this market lacked the burst of activity that had been counted upon earlier. Elevator men pointed with pride, however, to a record of loadings of over 13,000,000 bushels of all grains out of the houses into boats in four days prior to December 1. Stocks of grain in houses which had stood at over 27,000,000 bushels were cut down to slightly under 21,000,000 bushels after allowing for current receipts, and hopes were entertained in some quarters that the carryover of all grains at the close of navigation would be brought down to about 12,000,000 bushels. Those estimates, however, went all awry, as it turned out owing to commission men and the elevators having filled all their orders and to the late eastern business that had been looked for not materializing. Stocks of around 19,000,000 bushels of all grains remained on hand at the close of the shipping season. With the elevator capacity at Duluth and Superior rated at 38,000,000 bushels, space available to receive grains making for allowances for separation of grades is placed at 33,000,000 bushels. That would leave approximately 14,000,000 bushels storage space available in the houses for the winter months. Operators are placing some store upon the possibility of boat space being available in the harbor to take care of a moderate amount of grain as a result of a part of a fleet of 14 steamers with coal cargoes reaching this harbor just prior to the close of navigation wintering here. Grain men are endeavoring to line up that emergency tonnage in advance and it is expected that the boats will be laid up in the elevator slips with a view to their being ready to take on grain loads if their owners are called upon.

Only one business change was reported on this market during the last month. John H. Rohelsofer, buyer with the Tenney Company, took over the Board of Trade Membership of Clement K. Quinn.

The course of boat freights at times during the fall months reflected the spasmodic nature of the demand for boat space from time to time. Space for wheat and rye loading at the Head of the Lakes was quoted at as low as 2½ cents a bushel during late August before the fall marketing rush had set in. From that the rate was marked up to 3 cents and finally to 5 cents for late November loading, with space to include winter storage being at the same time taken up to 7 cents. Then after shipping contracts had been filled by commission houses and new orders failed to materialize, boat space went begging and tonnage was offered down to 3½ cents. Some operators succeeded in tying up boat tonnage at the close of the navigation season down at 4½ cents to include winter storage. That, it was pointed out, was a remarkably favorable proposition for shippers in that it gave them winter storage space at the elevator charge basis with the free transportation of the grain to Buffalo in the spring thrown in to sweeten the deal.

Great Northern Elevators set a near high record during the last week of November in loading out a cargo of 430,000 bushels of flaxseed into the steamer *Merton E. Farr* for Buffalo delivery. The average price of the seed in the cargo was \$1.62 a bushel, and it was insured for over \$1,100,000, thus making it the most valuable to leave this harbor during the season. The business was handled through H. S. Newell & Co., acting for eastern buyers. An interesting episode in connection with the shipment was that the steamer had a close call from being wrecked or seriously damaged at the start, through getting out of her course and knocking a span of the Interstate bridge off its foundation when leaving the Superior Harbor. As it happened, only a portion of the upper deck of the steamer was damaged.

Stocks carried over in Duluth and Superior elevators at the close of navigation included over 7,800,000 bushels of oats for which a market could not be found in the East. As it was the elevators shipped down four cargoes of oats to hold for storage at Buffalo. It had been presumed that other shipments

would have been made down there before the close of navigation in order to provide elevator space for other grains, but the holders of the oats concluded not to take any more chances upon holding additional quantities of them afloat in the East. Grain men at this point are feeling gratified over their ability to compete with Chicago and other points as an oats market as a result of the more favorable lineup of railroad freight rates and the entering of a new elevator interest into the trade here as buyers.

While demand for feeds was slow in starting on this market during the fall months on account of mild weather conditions and loggers holding back in putting in their camps, operators specializing in that line are looking forward to a steady business between now and next spring. R. M. White of the White Grain Company commented upon the greatly increased productions of oats in many northern Minnesota districts tributary to Duluth this season. Cars of oats were received by his house from many stations over that ground, that in other years had taken them from this market for feeding. Mr. White predicted the development of a good all-rail movement of oats to Middle West points for manufacturing purposes during the winter. His house had shared fully in the fall grain rush, and it had recorded the best operating season in its history. Commission men and elevator interests on the Duluth market have been gratified over the average high grading of the wheat and other grains marketed here during the present crop year. The weight of the wheat has run about two or three pounds to the bushel above the usual run of the grain sold here in other seasons and millers have not been forced to use as great discrimination in making their selections on the tables. Though a proportion of damp wheat came in from North Dakota districts after threshing was resumed after a lengthy period of wet weather, it was not found necessary to put any of it through the elevator dryers as had been feared. The amount of tough grain handled was negligible.

Operators here regretted the order issued by the Northwest Regional Committee recently cancelling the prohibition against the holding of grain cars at sampling points in this districts that was in effect during the rush of the marketing season. Complaint is made that the privilege of holding cars at sampling stations has in the past often led to abuses in the way of cars being unduly held before being forwarded to either Duluth or Minneapolis markets pending instructions from operators until they were able to determine which was the more advantageous receiving point at the time being.

Operating departments of the northwest railroads are being accorded every credit for handling a movement that exceeded all records for the Northwest during the crop year up to the close of navigation. That was credited to special efforts on the part of individual officials and to the work of agents of the car service division of the American Railway Association, under the direction of Superintendent P. C. Coleman of Minneapolis, who have just completed their work here. It was remembered that in 1922 and other previous years when the movement of grain was not nearly as heavy as during the past season congestion has resulted. Fear of possible tieups brought about two temporary embargoes of five days each against further shipments to this market during September and October. The great bulk of the grain routed to this market during the last fall was carried by the Great Northern, Northern Pacific and Soo lines. Those roads, with the other railroads running into Duluth, brought in 40,000 cars of grain alone. In many entire seasons the total number of cars brought to this market has not exceeded 60,000 cars of grain.

Receipts of grain at Duluth and Superior elevators during the present crop year, from August 1 to the close of navigation on December 19, aggregated 160,926,013 bushels of all grain, as compared with only 45,328,971 bushels up to the same period last year, of which 2,445,244 bushels was Canadian bonded grain. Wheat receipts were 89,413,390 bushels against 2,524,919,947 bushels last year. Corn receipts were 880,804 bushels against 1,295,776 bushels; oats, 15,551,366 bushels against 2,154,037 bushels; barley, 11,985,754 bushels against 3,179,074 bushels; rye, 31,812,377 against 8,082,689 bushels, and flaxseed, 14,582,322 against 5,607,448 bushels.

MILWAUKEE

C. O. SKINROOD - CORRESPONDENT

THE most striking point in the monthly report on receipts by the Milwaukee Chamber of Commerce is the extremely small supply of corn reported for the last month. The total is only 201,000 bushels as compared with a supply of 1,555,000 bushels for the corresponding month a year ago. Traders report that there is almost a famine in corn. The supply is only one-seventh of that of a year ago. Trade is so small as to be almost nominal. While this situation is largely a hang-over from the short corn supply of last season, Milwaukee grain men say the condition will be worse if anything when the new corn crop is considered. There is so little merchantable corn in sight that the trade does not know where the country will get its supply from. The corn famine condition is also indicated by the fact that No. 3 Yellow corn is now selling at \$1.19 while the price for the corresponding date of last year was only about 73 cents for the same grade. Corn is actually selling 46 cents a bushel higher than last year.

Milwaukee is still making a good showing in wheat trade with a supply for the past month of more than 1,100,000 bushels compared with only 190,000 bushels in round numbers a year ago. Some of the enterprising grain handlers of Milwaukee are responsible for this spirited bidding for grain and deflecting much larger wheat shipments to the Milwaukee market.

A striking feature of the feed trade for the past month is the big loss in shipments. The official figures show shipments of only about 7,000 tons as compared with shipments of more than 18,000 tons for the same month a year ago. The call for feed has been light, largely due to the fine fall pasturage and late grasses, which prevented the Wisconsin dairymen from feeding any considerable amount of millstuffs. Other buyers of feeds were also inert during the past month and the showing was consequently poor.

The Cargill Grain Company with offices in Milwaukee and Minneapolis is feeling the acute need for more storage space for grain. To meet this requirement, the company has leased the nine big storage tanks of the Lisbon Mill at La Crosse. These tanks were built several years ago but never used. The Kansas Flour Mills Company abandoned the mills immediately after their completion at a cost of several hundred thousand dollars. The Cargill Grain Company will utilize the tanks to store some 400 carloads of oats for a time.

The December rate of interest on advances has been fixed by the Milwaukee Chamber of Commerce at 6 per cent. This is the same as the rate of recent months.

The amount of grain in store at Milwaukee at the opening of the month reached a high level with 834,000 bushels of wheat, 30,000 bushels of corn, 2,474,000 bushels of oats, 311,000 bushels of barley and 534,000 bushels of rye. The storage of corn—only 30,000 bushels, shows how the demand has scraped down all supplies to the finest available point.

Edmond J. Lindsay, aged 86, one of the best known business men of Milwaukee and long a member of the Milwaukee Chamber of Commerce is dead. From the day when he was brought to land from a small schooner at what is now Detroit Street, Milwaukee, until now, Mr. Lindsay displayed the rugged pioneer spirit. At that time he was only five years old, so that 81 years of life had been passed in the Milwaukee district.

Mr. Lindsay's father in Scotland was a prominent maker of linens with 600 employees. In 1840 the Lindsay mill burned to the ground and with a period of industrial stagnation developing in the British Isles the father decided to try his luck in the United States. He arrived in New York in 1840 and six months later sent for his family. In the fall of 1843 the elder Lindsay and his family went to Albany by

steamer, thence by barge on the Erie Canal to Buffalo, thence by small schooner to Milwaukee. Like a romance reads the story of Edmond who came to great wealth in Milwaukee. He followed many occupations but finally settled into the implement trade. It was in this field he was best known over a series of decades.

* * *

The ships to be tied up at Milwaukee during the winter will be only about half as numerous as last year, according to Walter J. Fitzgerald, vessel agent. This condition results, Mr. Fitzgerald states, from the fact that high rates are being paid to carry grain from the head of the Great Lakes to the eastern ports.

"Because of the approach of the end of the season of navigation, there is a rush to ship grain," said Mr. Fitzgerald. "The carrying charge is 7½ cents a bushel where three weeks ago the rate was only 3 cents a bushel.

"This price includes storage charges until April 1, the grain being allowed to remain on the vessel until that date. The result will be that the eastern ports will have larger winter fleets than usual and the western ports will have smaller ones.

"Last year about 25 ships were moored at Milwaukee for the winter and this year there will be only about 12. This situation will make quite a difference to the Milwaukee outfitters as much money is spent each winter and spring in making necessary repairs."

Mr. Fitzgerald says that no grain is being shipped out of Milwaukee at the present time as the railroad rate is not high enough to warrant paying 7½ cents a bushel for lake shipments. The shipments are being made, he said, mostly from upper lake ports and from Fort William.

* * *

Several of the best known traffic experts of Milwaukee attended the convention of the National Industrial Traffic League held in New York in November. Among the delegates were H. W. Gehrke, manager of the Traffic Bureau of the Association of Commerce, J. L. Bowlus, manager of the Transportation Department of the Chamber of Commerce, A. C. Uecke, A. S. Murawsky, T. B. Maxfield and H. W. Ploss. Mr. Bowlus was chosen a director of the traffic league.

* * *

The Milwaukee Harbor Commission has taken an important step in the completion of the Milwaukee Harbor project, by announcing that negotiations for the purchase of the south end of Jones Island by the city have now reached the point where the deal will soon be closed with the Illinois Steel Company. Jones Island is known as the key to the Milwaukee Harbor project. Mr. Bruce asks that \$1,300,000 be included in the city budget for the harbor this year. A total of about \$1,750,000 will be needed by the Harbor Commission this year to buy the Illinois Steel land holdings and to go ahead with other work that is under way. Since the Harbor Commission has about \$450,000 on hand, it will be necessary for the city to furnish about \$1,300,000 more to keep the project going. The city, on the other hand, has planned to provide the Harbor Commission with \$1,500,000 so that more than ample funds will be on hand for the work in 1925, if present plans are carried out as promised.

Mr. Bruce also reports that the United States will build about 1,700 feet of south breakwater this year. This will cost almost \$500,000. The United States Government will have about \$720,000 available for this work in the coming year. The Government is building the break water as fast as the city completes the harbor building.

* * *

Secretary H. A. Plumb of the Milwaukee Chamber of Commerce is taking an active interest in trying to arrange for pulp shipments direct from Sweden to Milwaukee, with the thought that these ships can carry grain back to Montreal and possibly to Europe as return cargo.

Mr. Plumb points out that the canals of the St. Lawrence permit of ships about 255 feet long, with 42 foot beam and 14 feet draft. This permits of ships of about 60,000 bushels carrying capacity. Mr. Plumb pointed out to the Swedish pulp shippers that several millions of bushels of grain are sent from Milwaukee annually to Canadian ports. This grain might be carried in Swedish ships. Three Swedish vessels have arrived in Milwaukee this year with wood pulp and all of them took grain back to Montreal.

Milwaukee has never shipped any grain direct to Europe, but during the World War, a part cargo of flour was put on a steamer here and carried direct to Europe. Mr. Plumb believes that the Swedish business in pulp to Milwaukee will develop and that this will mean not only grain carrying to Montreal, but a little later, it will mean direct shipments to Europe even without the St. Lawrence deep waterway.

* * *

The Grain Marketing Company has taken a lease on 650,000 bushels of storage in concrete tanks which were formerly a part of Elevator "E" of the Chicago, Milwaukee & St. Paul Railway. This is the first announcement of A. R. Templeton, the Milwaukee representative, that the company had obtained any elevator space in Milwaukee.

After obtaining the lease the Marketing Company immediately set to work to overhaul and test track scales and to rebuild the railroad tracks which were

thrown out of line by the recent fire. With blower equipment installed, the company will be able to handle grain from cars to elevator and back to cars or to ship, perhaps by the middle of December. It is also expected that the company will have to add materially to the Milwaukee office force to take care of the largely expanded business in Wisconsin which will be certain as a result of the leasing of Elevator "E."

* * *

Milwaukee had only one small fire of special interest to the grain trade in the past month. This was a small blaze at the elevator of the Froedtert Grain & Malting Company, at Thirty-Second and Grant Streets, just a short distance beyond the city limits. The Milwaukee fire department responded to a special alarm, but employees of the elevator had the blaze under control when the apparatus arrived.

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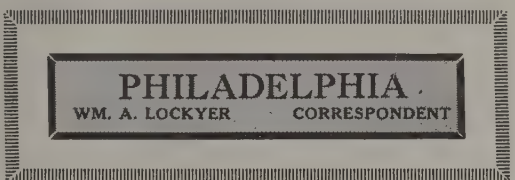
The grain shipments out of Milwaukee by water for the past season took an immense jump over the 1923 total, according to the records compiled by the secretary of the Milwaukee Chamber of Commerce. The record up to December 1 showed no less than 13,737,000 bushels of grain loaded out of Milwaukee in this navigation season, while the record for the same date a year ago was only 7,581,000 bushels. With insurance rates multiplied by seven on cargoes after December 1, the shipping season is practically over by that time, Secretary Plumb points out.

* * *

Among the new members recently added by the Milwaukee Chamber of Commerce are Herbert H. Smith of the Smith Milling Company; Arthur E. Ladish of the Ladish Company; John A. Hewitt, general agent of the Pere Marquette Railroad, and F. A. Kwitek, all of Milwaukee.

* * *

The mill feed market in Milwaukee during December is reported as strong with mill feeds rather scarce because millers are running in a restricted way and not much mill feed is available. Jobbers have small stocks and are taking more feeds to get ready for the big feeding demand of the winter. Mill feeds have advanced from \$3 to \$5 a ton in a few days recently.



EVEN though exports of flour, wheat and corn through the Port of Philadelphia should show a substantial increase between now and the first of the year, it is very probable that the aggregate for 1924 will be considerably below the 1923 totals according to statistics compiled by the Commercial Exchange for the eleven months period to date. In the case of oats, rye and barley, however, a very material gain over last year will be disclosed when final 1924 export figures are given out.

* * *

Public warehouse stocks of flour and grain in Philadelphia on December 1, last, are reported as follows: Flour, 129,059 barrels; wheat, 2,437,770 bushels; corn, 34,556 bushels; oats, 189,627 bushels; rye, 281,566 bushels, and barley, 2,872 bushels.

* * *

Plans have virtually been completed for rebuilding the Twentieth Street Elevator of the Reading Company, which was destroyed by fire about a year ago. While no announcement regarding details has been forthcoming from the Reading officials other than that the plans call for a steel and concrete structure and that it will be modernly equipped, it is expected that it will have a capacity close to that of the old building that was destroyed. The storage capacity of the old elevator was 300,000 bushels. It had a receiving capacity of 50 carloads per 10-hour period, and a delivery capacity of 100,000 bushels for the same period. The same company likewise is completing details of its new export elevator which it is to construct at Port Richmond, this city. This will have a capacity of 2,500,000 bushels and, according to Agnew T. Dice, president of the Reading Company, bids will soon be asked from contractors.

* * *

November unloading of grain at the Girard Point Elevator of the Pennsylvania Railroad aggregated 1,207 cars, of which 1,162 cars were wheat and 45 cars were rye. At the Port Richmond Elevator of the Reading Company, 1,130 cars were unloaded during the month, as follows: wheat, 1,009 cars; barley, 35 cars; rye, 25 cars and oats, 11 cars. Fifty-nine cars were unloaded at the Twenty-ninth Street Elevator of the latter company during November, of which 41 cars were oats.

* * *

In response to the request of Harvey C. Miller, president of the Philadelphia Tidewater Terminal and a factor in the local flour and grain trade, the Pennsylvania System, Baltimore & Ohio Railroad and the Reading Company have applied to the Trunk Line

Association to have certain traffic regulations and rates placed in effect in the Port of Philadelphia which will enable the city to obtain a larger portion of the export trade originating in western cities. Mr. Miller seeks to give Philadelphia the same privilege recently granted Baltimore concerning the reshipping of export cargo to another port when its progress is likely to be delayed. In other words, if merchandise is shipped to this city under the new proposal and a vessel is not available, it can be reshipped to another port by paying the difference in the differential between the two ports. The new rates and rulings became effective in Baltimore last month.

* * *

H. D. Irwin, head of Barnes, Irwin & Co., grain exporters, and Hubert J. Horan, president of the Commercial Exchange, are members of the special committee representing the Port of Philadelphia Ocean Traffic Bureau which has just conferred with Pennsylvania Railroad officials in the first of a series of meetings with prominent railroad executives to ascertain the extent to which the carriers are willing to co-operate in the recently launched movement to increase the volume of business moving via Philadelphia. The presidents of the Reading Company, Baltimore & Ohio Railroad, and New York Central Lines are to be visited in this campaign. They, together with the heads of several other carriers, attended the port banquet given last month under the auspices of the Commercial Exchange, and pledged their co-operation but Mr. Irwin's committee plans to sound them out at greater length in the conferences which are now under way.

* * *

Pennsylvania farmers, through the presence of garlic and the Angoumois moth in their grain, and also because of high moisture, have lost approximately \$823,000 on 5,406 carloads of wheat received at Philadelphia and Baltimore terminals in the last four years, according to estimates of George A. Stuart, head of the Bureau of Markets, Pennsylvania Department of Agriculture. These figures have been arrived at, it is said, after four years study of problems arising in the marketing of Pennsylvania wheat.

* * *

Wright, Dickman and Pugh, steamship operators and agents, have been proposed for membership in the Commercial Exchange.

* * *

The Philadelphia Maritime Exchange, with which local grain and flour interests are closely affiliated, will celebrate its fiftieth anniversary next April. While no definite steps have actually been taken, it is expected that the anniversary will be fittingly observed when this organization shall have completed 50 years of active service in behalf of the city's commercial, shipping, banking and other interests. J. S. W. Holton, president of the Exchange, has already referred to the approaching anniversary of the Exchange, which was opened in April, 1875, and it is expected that as the time approaches for the rounding out of a half century's activity, plans will have taken shape for a proper celebration.

* * *

With the closing of Montreal, local grain exporters are taking a more optimistic view regarding increased grain shipments out of Philadelphia.

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John Mattheal, traffic manager of the Commercial Exchange, as been advised that because of accumulation, the Reading Company has embargoed all shipments of bulk grain consigned to Philadelphia for export through the Port Richmond Elevator, moving on either through export or domestic bills of lading. Application for permits should be made to A. T. Owen, 615 Reading Terminal, Philadelphia.

* * *

Robert Morris, chairman of the Grain Committee, and John Linn, chief grain inspector, represented the Commercial Exchange at the recent meeting in Norfolk, Va., of the seaboard grain inspectors.

* * *

William Scattergood, of S. F. Scattergood & Co., grain and feed dealers, has returned from a three weeks' business trip through Pennsylvania.

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Robert J. McKnight, senior member of the firm of Robert McKnight Sons, one of the oldest flour and grain houses in Philadelphia and as such long identified with the Commercial Exchange, is seriously ill.

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Out of town interests that have visited the trade here recently included R. L. Groff, Minneapolis. W. H. Sudduth, Minneapolis; B. G. Forrester, Toledo, Ohio; W. K. Clark, St. Louis, Mo.; J. E. Bailey, of Indianapolis; E. F. Lawler, Detroit; George Beaulieu, Montreal; S. F. Kelm, St. Paul; Max Guggenheim, Chicago; E. S. Wadsworth, Minneapolis; M. Moore, of New York; J. Y. Thomas, Attica, N. Y.; J. P. Ahern, Wilmington, Del.; H. A. Hilyard, Kenton, Del.; Fred T. Roberts, York, Pa.; J. H. Schaeffer, Kutztown, Pa.; C. T. Sullivan, Springfield, Pa.; L. A. Kay, Phoenixville, Pa.; Frank Jackson, Media, Pa.; J. H. Cadawallader, Garret, Pa.; W. K. Phillips, Cardiff, Wales; O. S. Downie, Chicago; C. G. Sanford, New Orleans; W. A. Nickles, Shippensburg, Pa.; George O. Smith, Harrisburg, Pa.; H. T. Heather, Sudlersville, Mo.; W. A. Fennimore, Mt. Holley, N. J., and Clarence J. Smith, of Woodstown, N. J.

TOLEDO

S. M. BENDER

CORRESPONDENT

TOLEDO is coming into its own again as a harbor for winter storage of grain in ship bottoms. Last year, 18 heavily laden boats wintered here. Indications are that the fleet will be increased to at least 20 this year. This is about Toledo's capacity with present facilities for mooring of loaded vessels safely. In addition there will be the usual large fleet in Bay View Park Lagoon which is already gathered there. The barge *Sagamore* with 240,000 bushels of wheat, the barge *Maida* with 225,000 bushels and the steamer *Collender* with 178,000 bushels are now moored at the Baltimore and Ohio docks. These cargoes will be held until the opening of navigation next spring. Other boats listed for mooring here are the steamers *P. W. Sherman* with 210,000 bushels of wheat from Winnipeg, the *A. W. Osborne* with 225,000 bushels of Manitoba wheat, the *W. T. Rapprick* with 240,000 bushels of flaxseed, the *William B. Davock* with 250,000 bushels of flaxseed and the *E. Z. Pope* with 125,000 bushels of wheat and the *A. E. R. Schneider* with 540,000 bushels of oats.

Some of these ships are on their way to Toledo and others are negotiating for space. When they are all in their berths it will be the biggest fleet of loaded grain boats that have been quartered here in years. Not so many years ago there were many trim-appearing schooners lining the Toledo harbor but these 20 will carry more grain than all those of the old days. These boats mean thousands of dollars to Toledo each year. In addition to the maintenance of the ship there is the annual fitting and laying up operations during which time the whole crews live here and large amounts are spent in repairs and supplies. Old sailors who live here get a great kick out of watching the ships being made ready for the next season's journey.

The unusually favorable weather for the ripening of corn raised the November estimate one bushel over the preceding month in Ohio. The yield per acre is estimated at 26 bushels, which is not normal, but a fair average considering the start the crop received. The reserves of corn on Ohio farms are estimated at 3.6 per cent which is slightly less than last year. The quality of the crop is very poor as is shown by the estimate of only 56 per cent merchantable quality. Last year the estimate was 20 points higher, according to state statistician C. J. West, who compiled the above figures.

Winter wheat is reported in very good condition so far according to farmers nearby. Recent rains gave it a fine start and if the snow comes to protect it before a hard freeze it should winter without serious damage. Many fields are thoroughly soaked right now and will be hurt should it turn severely cold before snowing.

Edward Nettleton of Chicago visited his cousin Edward Nettleton of the Imperial Grain & Milling Company during the month.

Ohio corn prices in November averaged \$1.04 a bushel as compared with \$1.16 the month before and 72 cents in November, 1923. Wheat was bringing \$1.45 which was 8 cents more than during October and the price the year before was exactly \$1. The oats price declined slightly during the month and stood at 50 cents as compared with 42 cents a year ago. Rye showed the most increase over last year with an average of \$1.17 as compared with 74 cents last year. Farm hay prices have been stationary at from \$12.25 to \$15 compared with a range of \$15 to \$19.25 last year.

Flour sales have declined the past month and millers are cutting production to meet the smaller demand. Many buyers were caught unawares at the beginning of the season when wheat advanced so suddenly and did not buy heavily. They procrastinated from day to day and week after week and saw flour steadily rising. When they fully awoke to the world situation the price had become as high as the forbidden grapes and so they bought on a hand to mouth basis. Stocks are not large in any quarter and the time must come when supplies will have to be replenished. Just now many bakers and jobbers have fair amounts of flour on hand and prefer to await a break before taking on any more. They may be fooled again but appear willing to take the chance.

Clover seed has furnished plenty of action the past month and the trade has been heavy. Our domestic situation with a short crop and a poor one gave the incentive for the early advance and now conditions abroad and the very small receipts are adding strength to an already bullish outlook. The month of November and early December usually bring large amounts of Clover to this market but this year proves the exception to the rule. It is said there is fair amounts of Clover back in the country in many Clover sections but the farmer is unwilling to part with it at present levels. Just like the seed dealer he is looking for a spring advance that will more than pay for carrying

it. The demand normally starts after the first of the year and this year may bring a rush of buying orders to care for the trade. Foreign reports have been pessimistic since their crop was harvested and it looked like there might be a shortage over there. However, lately it begins to look as if they might have some Clover for export and will ship it to the U. S. The fear that they would have no Red Clover has been dispelled by the consignments already on the way here and the sales of futures against shipments to be made. The Ohio-Michigan and Indiana crops averaged light and the acreage was smaller than a year ago. Seed that has been received here from the Far West has a better color and is cleaner than local offerings. Timothy was a large crop and of excellent quality and this has been a factor in determining the price. Futures of both Timothy and Alsike have been neglected because of the glaring shortage of Clover and hence have not responded as they would if it were not for the interest in Red Clover.

Toledo flour stocks on December 1 as reported by local mills were 36,876 barrels compared with 33,000 barrels November 1 and 33,000 barrels a year ago on December 1.

Farmers of the state are holding approximately 26 per cent of the wheat crop, and 40 per cent of the oats produced in Ohio last season, according to an announcement made by D. M. Cash of the grain sales department of the Ohio Farm Bureau Federation the past week. Corn holdings are so uncertain that it is impossible to estimate them accurately particularly with relation to the movement to market. These estimates are made on replies to questions sent to 400 elevators in all parts of the state. Information was requested as to the amount of wheat and oats in the hands of farmers and the estimated movement of corn to market during the month of December. Replies to the latter question show strikingly the effect of Ohio's poor corn crop on the market. Elevators in many parts of the state are already buying corn for feeding purposes in greater amounts than they are selling. The reports show the crop outturn was unusually spotted as there were good fields and bad side by side. The movement of oats is materially affected by the corn situation as they will be used at home in many localities.

Kenny Nichol of the Grain Marketing Corporation stopped off in Toledo on his way home from the Grain Dealers meeting and called on his many friends located here.

Hay trade and prices have both been dull the past month and dealers say a good prolonged cold snap is needed to liven things up a bit. Good hay is plentiful and farmers have been too busy with their corn to do any hauling to market. Stocks should increase after the new year and dealers will then sell to localities where a shortage occurred.

Rod McKinnon of Thomson & McKinnon and R. T. Mansfield of Bartlett Frazier Co. were visitors on the exchange floor during the month.

Most of Ohio's wheat crop went into the ground under excellent conditions and at a time when the Hessian fly had disappeared. Therefore it is expected there will be a very light infestation next year.

The Ohio Grain Dealers Association and the Ohio millers both held one day meetings in Columbus during the month. Both meetings were held on successive days and this helped to swell the attendance. The programs were excellent and were enjoyed by dealers and millers who feel very optimistic about this season and the one of 1925-26.

Louis J. Tabor of Columbus, Ohio, was named as a member of the committee to investigate national agricultural conditions during the past month. He is also master of the National Grange.

One of the most drastic revisions of freight rates between Toledo and many of the large cities in the East will soon be undertaken by the Interstate Commerce Commission, according to word received by L. G. Macomber, traffic commissioner for the Chamber of Commerce and the Produce Exchange. Some time ago the Commission revised rates in the New England and Central Freight Association territories. Toledo is located in the latter. However, the eastern trunk-line territory lying between these two divisions was not touched and it is now proposed to revise rates in that territory and then generally build up new rates between the three territories. It is proposed by the carriers to discard the old Chicago-New York scale on which all Toledo rates are now based and substitute the same scale used in the Central Freight Association Territory. This arrangement will permit dealers here to ship more grain into eastern territory and meet competition which has made great headway the past few years.

A. Mennel, senior member of the milling firm which bears his name, is spending the winter in Florida and is reported to be enjoying good health amid the palms of the Sunny South.

Frank Trout, formerly traffic manager of the Sheets Elevator, accepted a position with the Toledo Paper

Stock Company and the first day at his new work fell down an elevator shaft and was seriously injured. He is now recovering and is reported to be out of danger.

Toledo is now ready to accept trades in cotton futures and firms are well equipped to make prompt execution or orders through the six private wires direct to the Chicago Board.

John Rupp, manager of the Elmira Elevator Company, Elmira, Ohio, is one of the most popular out of town visitors since his wife sent him up here with a few sample boxes of her chocolate candy. They went so fast John hardly had time to get his breath and so he made a second trip and brought a grip full and then took orders for enough to fill a box car. He expects to come again soon but woe to John if he is unable to fill all the orders.

Lester Howard of The C. A. King & Co. was elected president of the Exchange Traffic Association at the monthly meeting held last Thursday night in the Elks Club. Those who attended say that the Association is planning many activities for the coming year to broaden the work already being done.

Dealers and millers in this thriving grain center take this opportunity to wish their friends in the trade a very Merry Christmas and a Happy New Year.

Grain inspections for the month of November were 449 cars of wheat; by Lake Canadian Spring wheat, 893,915 bushels; 192 cars of corn; 202 cars of oats; 45 cars of rye; and three cars of barley. Total, 891 cars.

CINCINNATI

HARRY A. KENNY

CORRESPONDENT

LOCAL grain men reached the year's highest quotations on the Cincinnati market during the past month, when wheat, corn, oats and rye shared in an advance of from 1 to 4 cents abushel. Dealers said that the rise was only in accord with higher grain prices all over the country, due to reduced estimates on the world grain crop and a heavy foreign demand. Although official figures were lacking, D. J. Schuh, executive secretary of the Cincinnati Grain and Hay Exchange, said that receipts of grain and hay for November were on a par with the same period of last year. However, for the 11 months ending November 30, 1,800 more cars of grain and feed and 1,200 cars of hay were handled in this market than during the corresponding period of 1923.

Cincinnati flour dealers made it known that higher prices for flour would be forthcoming if wheat prices continued to mount. While indications are that business will be quiet over the remainder of the year, the outlook for 1925 in the opinion of the trade in general is quite encouraging.

A two-day meeting was held at the Hotel Sinton November 21 and 22 by southern Ohio and northern Kentucky feed dealers, under the auspices of the Ralston-Purina Company. More than a hundred dealers were present. The conference was turned into a school of instruction and various problems of the industry were dramatized by the members, while the audience looked on and took notes. There were four such sketches on the program, embracing the subjects of general merchandising, hog, dairy and horse problems. At the closing session a banquet was held at which time Henry Feldman, Norwood, Ohio, feed dealer and J. H. Feeders & Sons of Covington, Ky., were publicly recognized for their meritorious service to the conference during the past year. The 1925 conference will be held in this city either late in November or early in December. It was announced that meetings of affiliated divisional bodies would take place quarterly during the coming year.

Robert L. Early, secretary of the Early & Daniel Company, has returned from a hunting trip in Mississippi, where he with several friends bagged several dozen wild ducks during their week's stay.

J. A. Hallam, inspector of the Cincinnati Grain and Hay Exchange, attended the conference on grading of sorghums at Chicago recently, which was conducted under the auspices of the Department of Agriculture.

Frank L. Watkins, president of the Cincinnati Grain & Hay Exchange, has announced that a nominating committee will be appointed before the end of this month to select officers to be voted on at the annual election next month.

The Perin-Brouse-Skidmore Grain & Milling Company which recently started extensive repairs and the construction of an additional building for the manufacture of animal feeds announces the completion of the

remodeling and installation of entirely new machinery. The company is the exclusive distributor of "Sugar Jack," brand of malted feed and in addition manufactures corn products and is a large handler of grain and hay.

D. W. Hopkins of the Mutual Commission Company visited his old home, Beverly, N. J., last month where he spent Thanksgiving with his parents. He also attended the Cornell-Pennsylvania football game at Philadelphia before returning to this city.

Ambrose Bender of A. Bender & Sons, flour and mill feed distributors, has been re-elected a director and corresponding secretary of the Walnut Hills Business Men's Club.

Charles C. Hill, associated with Frank Maguire in the hay business, attended the sixtieth wedding anniversary of his parents at the home of his brother, Mayor H. H. Hill, at Milford, Ohio, last month.

Stocks of grain in first hands at Cincinnati, Dec. 6 were as follows: Wheat 267,566 bushels; corn 95,582 bushels; oats 305,913 bushels and rye 4,984 bushels.

BUFFALO

ELMER M. HILL CORRESPONDENT

THE Hecker-Jones-Jewell Milling Company of New York, controlled by the Standard Milling Company, has acquired by purchase the H-O Cereal Company, Inc., of Buffalo, and the H-O Cereal Company, Ltd., of Ayr, Canada. The purchase price is reported to be approximately \$2,000,000. The general executive offices of the company will be moved to Buffalo, where space has been leased in the new Genesee Building. The new company controls a series of grain storage elevators, milling plants and cereal mills in the Great Lakes district and in New York City.

The new board of directors of the H-O Cereal Company in the United States and Canada includes G. K. Morrow, president of the Gold Dust Corporation; A. F. Walker, president of the Standard Milling Company; Alfred Jaretski, of Sullivan & Cromwell; F. J. Rodewalk, of New York and Henry P. Werner, former president of the H-O Cereal Mills of Buffalo. Officers of the consolidated companies will be elected later in the month at the organization meeting in Buffalo.

The Standard Milling Company of New York is the holding company for the Hecker-Jones-Jewell Company, which has a large mill and grain elevator in Buffalo. The Standard Milling Company also owns the Hecker Cereal Company of New York. It is intended to consolidate the Hecker company and the H-O Cereal Company of Buffalo. Machinery and equipment of the Hecker Cereal Company will be moved from New York to the plant of the H-O Cereal

mills at Fulton, Marvin and Perry Streets, Buffalo. This will then make Buffalo an important point in the production of cereals.

The effect of this consolidation of cereal companies will be to create one of the largest as well as one of the most important factors in the cereal business, both from the viewpoint of volume of business and the control of several nationally advertised trade marks and brands of cereals, among which are "H-O Oats," "Hecker's Cream Oats," "Force (Sunny Jim) Wheat Flakes," "Hecker's Cream Farina," "Hecker's Pancake Flour" and "Presto Flour."

It is proposed to keep the executive and sales force of the H-O Mills in Buffalo but there will be a branch office in New York City, another in one of the eastern cities, on the Pacific Coast, in Canada and abroad. The H-O Mill in Buffalo has in recent years been enlarged with a view to future expansion and has ample facilities for the present for the larger operations to be conducted in Buffalo. To make more room for manufacturing at the mill, the offices of the company will be moved to the entire fifteenth floor of the new Genesee Building at Main and West Genesee Streets. The H-O Company was founded 50 years ago at Craigville, N. Y., for the manufacture of Hornby's Oats, a name later contracted to H-O. The company soon moved to Buffalo and afterwards brought out "Force" (Sunny Jim) Wheat Flakes and "Presto" flour.

The new state grain elevator at Oswego is expected to be placed in operation late this month or early in January, it was announced by the New York state department of public works at Albany. Western grain shippers have already planned to make use of the new storage elevator as soon as it is available for use. Contractors are now completing the work of installing the spouting apparatus and other interior mechanical devices.

During the month of November, terminal elevators in the Buffalo Harbor unloaded 42,632,000 bushels of grain as compared with 30,088,000 for the corresponding period of a year ago. For the present season up to and including November 30, there has been unloaded at Buffalo elevators a total of 227,645,000 bushels of grain as compared with 136,570,000 for the corresponding period of 1923, an increase of more than 91,000,000 bushels for the present season, and a record for the Buffalo Harbor. During the last week of the month, elevators unloaded 9,234,000 bushels of grain and they loaded 4,530 cars and 648,000 bushels were loaded into canal boats for shipment over the state waterway to the tidewater points before the close of the 1924 navigation season on the canal.

The property of the Electric Grain Elevator Company, on the Hamburg turnpike has been sold to Nisbet Grammar, president of the Eastern Grain, Mill & Elevator Corporation of Buffalo. The price involved is said to be approximately \$1,000,000. The transfer becomes effective April 1, 1925. The property of the Electric Elevator includes the grain storage elevator and adjacent property on the turnpike and Buffalo River at the Louisville Street bridge. There are 720

feet of waterfront, 400 feet on the turnpike and 800 feet in Charles Street. The elevator has a storage capacity of 2,000,000 bushels and direct rail connections with the Pennsylvania lines. The elevator was managed by H. P. Kneeland. The corporation is controlled by Yale Kneeland and Charles Mitchell of New York. The elevator has been in existence for 20 years.

The Saskatchewan Co-operative Elevator Company, Ltd., of western Canada, which is planning the construction of a \$1,000,000 grain elevator in the outer harbor on underwater lands, has awarded the contract for the substructure to the Barnett & Record Company, of Minneapolis. This preliminary contract calls for an initial expenditure of approximately \$250,000. Construction work will be started at once so that work on the super-structure can be got under way in the early spring.

The advent of fancy rates in the Great Lakes grain trade was watched with interest during the opening week in December. Predictions of a rapid upward fluctuation of figures in the grain trade materialized and prices for all loading periods reached a new high level. Scarcity of available capacity and the lateness of the season prompted shippers to offer fancy rates in an effort to secure tonnage for immediate loading. Unfavorable weather conditions also aided vessel owners in their quest for higher prices. Boats from Fort William to Buffalo are getting 5 cents for December shipment while other boats are being chartered at 5½ cents. Storage rates from Duluth and Superior to Buffalo range from 6½ to 6¾ cents while tonnage to load at Fort William and Port Arthur to hold at Georgian Bay Ports for the winter is bringing 6½ cents.

Hull insurance on the Great Lakes expired at midnight November 30 and vessels in the grain trade that sailed after that date up to December 5 were forced to pay ½ of 1 per cent. The rate from December 5 to 9 was ¾ of 1 per cent and from December 9 to 12 was 1 per cent in addition to the regular rate.

A slight increase was recorded in stocks of grain at the Canadian Head of the Lakes during the first week of December when the fleet loaded 14,012,443 bushels and receipts at the Twin Ports totalled 14,385,961 bushels. The elevators at Fort William and Port Arthur held 39,247,170 bushels at midnight November 21, which represented a considerable increase over the corresponding period of 1923.

Lewis Moyer, senior member of the firm of Moyer Bros., which for many years has been engaged in the wholesale flour and feed business in St. Katharines, Ont., died early last month. He was 61 years old and had been a resident of the city for more than 20 years. Besides his widow, Mr. Moyer is survived by a sister and two brothers.

The New York State Barge Canal between the Niagara River at Tonawanda and the Hudson River at Albany, was closed to navigation December 13. The Champlain, Cayuga and Seneca Canals were closed for the season at midnight, December 6. R. K. Fuller,



ELECTRIC ELEVATOR, BUFFALO, N. Y., JUST ACQUIRED BY THE EASTERN GRAIN, MILL & ELEVATOR CORPORATION

commissioner of the state canals and waterways, announced that storage of boats in lock chambers this winter would not be permitted. There was a big rush of grain over the state waterway from Buffalo elevators to tidewater points during the last two weeks of the season.

The Norwegian steamer *Agga*, which took a load of grain from Buffalo to Montreal via Welland Ship Canal, will load hay and oats at that port for Newfoundland. She then will go to Spain and Italy for the winter. Her sister ship, the *Lisken*, recently loaded a cargo of grain at Fort William, at the Canadian head of the lakes, for Germany. Both boats hail from Bergen, Norway. They have been engaged in the Great Lakes grain trade all season.

Directors of the North Tonawanda Chamber of Commerce will make a determined fight this winter before the New York state legislature in Albany in an effort to have the state erect and maintain a grain elevator at the western terminal of the New York State Barge Canal at North Tonawanda. The movement for a state-owned grain elevator at the western terminal of the canal has the support of large grain shippers at Buffalo and many shippers in the West who use the state canal to ship grain from Buffalo to tidewater.

NEW YORK

C. K. TRAFTON - - CORRESPONDENT

R. S. HOLT of Middleton & Co., Ltd., exporters of flour and other grain products, was welcomed back on 'Change after a six weeks' trip to Europe, which was spent largely in England. He brought back hearty greetings and best wishes to all friends in this country from Col. Tasker, who during the great war was in full charge of the buying of flour and other grain products for Great Britain, and during his long official residence here made a host of friends. Mr. Holt is a son of Philetus Holt, who was vice-president of the New York Produce Exchange in 1922 and until the spring of 1924, when he retired from active business and hence refused renomination. Previous to retiring Philetus Holt was head of the firm of Holt & Co., large receivers and exporters of flour, etc. which was recognized as one of the oldest concerns of its kind in the country, having been in existence more than a century.

"Tommy" Howell, the well known grain operator on the Chicago Board of Trade, was visiting friends in the local market late in November.

John M. Shaack, a grain operator in the pit on the Board of Trade, Chicago, spent about a week late in November with his friends on the New York Produce Exchange. Manifestly this sounds by no means unusual, but it must be said, in explanation, that Mr. Shaack attracted much interest as he occupies an exceedingly unique position. In short, he is totally blind, but in spite of this serious draw-back is a successful trader in the pit. He has a host of friends in the trade and keeps thoroughly informed and hence gets along satisfactorily. He was accompanied by his brother, Harry, who is a trader on the Board for Harris, Winthrop & Co.

George B. Urban, one of the leading spirits in the George Urban Milling Company, of Buffalo, of which his father, George Urban Jr., is president, was on 'Change late in November and received a hearty welcome from his numerous friends. It turns out that Mr. Urban has become Republican presidential elector to succeed his father, who filled that high position for several years. Members of the flour and grain trade were pleased to hear that his father, who is a member of the New York Produce Exchange, was feeling fine, having recovered from his recent illness.

Leo Brager, grain broker and popular representative on 'Change of Cross, Roy, Eberhardt & Harris of Chicago, left late in November with his family to visit his old home in Switzerland. He is expected back on 'Change around the first of the year.

Some of the wags in the grain trade facetiously claim that wheat has gone to a "silver basis," but the only foundation they had for this was that Gray Silver, president of the Grain Marketing Company, was alleged to have predicted that wheat was going to advance to \$2.50 per bushel.

The old house of Montgomery & Jenkins, brokers in grain, cottonseed oil, etc., have notified the New York Produce Exchange that Howard E. Norris has been admitted as a partner. It was the consensus not only among the senior members of the firm, but also brokers on 'Change, that this promotion was well merited, as Mr. Norris although a young man, has been with the firm for several years as a clerk and later as a representative on 'Change. He made excellent progress, having won general esteem because of his energy, close application to his duties, and also by his all around

satisfactory behavior. This promotion was the sequel of the sudden passing away of Walter R. Jenkins, age 64, who was attending to business as usual on 'Change the day before his unexpected death, which was due to heart failure.

O. E. M. Keller, president of the Arcady Farms Milling Company, Chicago, was a visitor in this and other eastern markets later in November.

F. J. Saibert, who is a junior partner in the firm of J. E. Bennett & Co., grain merchants of Chicago, New York and elsewhere, came to this market late in November to relieve one of his partners, J. B. Johnson, resident manager, who was absent because of an operation.

Joseph Lamy and Mr. Paddleford, grain commission merchants of Chicago, were visiting friends in the local market late in November.

Barnet Farrol of the Farrol Bros., grain commission merchants of Chicago, was a visitor on the New York Produce Exchange late in November.

E. D. McKenna of the Chicago grain commission house of McKenna & Dickey, was among visitors in the local grain market late in November.

B. W. Snow, of Bartlett Frazier Co. of Chicago, who is recognized as one of the leading crop experts of the country, came east late in November to attend the annual reunion of the Snow family. This highly enjoyable function was again held at the home of his brother in northern New Jersey, and as customary, about 30 members of the family gathered around the huge table. Mr. Snow said that although the movement of wheat from the interior had been exceedingly rapid this year,



BERNARD W. SNOW

leaving only about 25 per cent reserves in farmers' hands, he was convinced that there were comparatively small supplies held in northwestern country elevators, as the wheat had gone promptly to terminals.

Jack Patten, a young son of James A. Patten, for many years one of the leading grain operators on the Chicago Board of Trade, was visiting friends in the local market late last month.

James P. Reid, has been elected a member of the New York Produce Exchange as a representative of the Co-operative Wholesale Society, Ltd., which large organization has been an active buyer in this and other domestic markets of foodstuffs for shipment to British markets.

George R. Roys, the manager in this territory for the Canadian Co-operative Wheat Producers, Ltd., who recently opened offices in the New York Produce Exchange, is an applicant for membership.

George H. Baston, formerly flour manager of the P. N. Gray Corporation has ceased to represent that concern on 'Change, has gone with the Continental Grain Company in a similar capacity. It was afterwards rumored on 'Change that the P. N. Gray Corporation was about to liquidate.

Members of the New York Produce Exchange as well as grain and flour dealers generally, were greatly shocked to hear of the sudden death of O. H. Montgomery, active head as well as secretary-treasurer of N. T. Swezey's Sons & Co., one of the largest flour jobbing concerns in the metropolitan district. On November 28, Mr. Montgomery was attending to business as usual and late in the day was at his desk conversing with his partner, L. F. W. Kahler, vice-presi-

dent of the firm, when he collapsed as a result of heart disease. Mr. Montgomery, who was 60 years old, began with the house as a clerk 35 years ago and became secretary-treasurer in 1894, and has been a member of the New York Produce Exchange for 25 years. Although Mr. Montgomery had been in poor health for nearly a year, his condition was not considered dangerous and his death was unexpected.

Clarence H. Smith, who for years was associated with his father, the late Philetus Smith, in the flour receiving business and carried on the business since his father's death, has been elected a member of the New York Produce Exchange.

George S. Chilton, who is connected with the Grain Growers Export Company, Inc., is an applicant for membership on the New York Produce Exchange.

Maurice J. Dugan, who has long been associated with the old house of P. Lenane & Bro., distributors of grain, hay and feed in this territory, has been elected a member of the New York Produce Exchange to represent his firm and to assist Thomas Lenane, who has for several years been the head of the concern following the death of his father.

John F. Barrett, the well known grain trader of the Chicago Board of Trade and head of the firm of John F. Barrett & Co., grain, stocks, etc., is an applicant for membership on the New York Produce Exchange.

E. S. Westbrook, vice-president of the old grain house of Bartlett Frazier Co. of Chicago, New York, etc., was visiting friends on 'Change late in November.

There has been a yarn in circulation on 'Change among grain and feed brokers that Mrs. Woodhead had gone to her lawyer to start divorce proceedings. He said "On what grounds?" She answered, "Oh, he muttered some girls' names in his sleep." "Name one," said the lawyer. "Well, one was Alice (Allis) Chalmers."

Members of the local grain and feed trade, and especially on the New York Produce Exchange, were pleased to hear that their old friend and associate, Wright S. Travis, who was one of the oldest distributors of grain, feed, etc., in this country, being 80 years of age, was feeling somewhat improved after being ill and absent from business for over a month. Still it was feared that he might never become active in the market again because of his age.

M. Lee Marshall of Chicago, head of the new Continental Bakeries, was visiting members of the flour trade early this month.

M. Hirsch, manager of the Getreide Commission, Ltd., Duesseldorf, Germany, received a hearty welcome from members of the grain trade on 'Change, where he was introduced by his firm's United States representative, William Benkert.

Gilbert Tompkins, one of the oldest members of the New York Produce Exchange, who has been active as a grain broker for half a century, having represented several Chicago commission houses, has been ill and absent from business for over a month. This, naturally, caused anxiety among his many friends as they feared he would no longer be as active as he formerly was, his advanced years being a serious obstacle, as he is 76 years of age. In spite of this he had been exceedingly sprightly and energetic until a few months ago.

KANSAS CITY

B. S. BROWN - - CORRESPONDENT

TRADE has been moving lively in Kansas City this fall and winter—so lively in fact that the need of additional facilities has been keenly felt. The most pressing need is rather for means of more expeditious handling, as well as for increased capacity; in order to use the available capacity to best advantage. At least two projects for extensive improvements and additional storage space, have been definitely announced. One is the plan for the expenditure of about \$2,000,000 on the Santa Fe elevator, known as Elevator "A," whereby the capacity will be increased from 5,200,000 to 6,000,000 bushels; and installations and equipment added that still greatly facilitate the handling of grain. Four car dumpers, whereby 240 cars could be handled, in or out, in eight hours; 12 scales of 150,000 pounds capacity each, and increased electrical power equipment, besides improvement in headhouse and trackage, are among the features of the plans. The elevator is under lease to the Grain Marketing Company, Geo. H. Davis, president. Another important elevator improvement, is in the Murray Elevator, on the Burlington Railroad, in North Kansas City, operated by the Norris Grain Company. The present capacity of 1,600,000 will be increased by about a million bushels, with a concrete

structure, the plans involving also other improvements; contract has been let to the Burrell Company. Henry Lichtig & Co., operating the Eagle Elevator, on the Missouri Pacific, announce that the capacity, 70,000, probably will be increased in the spring. Reports are heard of other elevator improvement projects, but no official announcements on these are yet ready.

Wheat began to lose a little of its vigor in the market, around the first of December. It was reported that in many districts, the farmers had sold down to an almost unprecedented low level of reserves, and comment was made that these communities were "drained" of their wheat. The Kansas City market showed a new high level of wheat in storage during November, above 19,000,000 bushels, and December opened with the amount over 18,000,000.

Anxiety had begun to be shown over the sown wheat in southwestern districts, in some places no rain having fallen for four months, and grain lying dry in the field. In other districts there had been so little moisture that growing wheat was in poor shape. The first moisture in some of these districts came Thanksgiving, with the first snow of the season; and in December, healthy rains and snows brought the desired volume of wetness.

Corn has proved a serious enigma, from several angles. The price continued strong, and there were so many "bulls" in the market that a good many different arguments were exploited to show the reason for expected higher prices in the industries depending more or less on corn. The most critical factor apparently was the live stock feeding factor; and the startling rise in hog prices in December, gave color to hopes that this outlet for corn might be counted on. But comment generally was that hogs are being sold too heavily in light weights—and that there will not be a generally important outlet in that direction, especially in Kansas and Missouri, where other feeds are available. Rough feeds are so plentiful that feeding of cattle is continuing strongly. The low prices of cottonseed products is said to be a factor in corn also. Iowa has taken a good bulk of corn from this market so far, because of poor condition of the Iowa corn production; though this outlet seemed to slacken early in December, when reports came of better corn available there. A great deal of corn has gone into elevators here replacing wheat. The open weather and the availability of roughage, have been two factors so far, that have prevented the development of the real influences on corn, and the showing of the real demand for the winter.

J. B. Bracken, for the past two years manager of the Kansas City office of Lamson Bros., will open an office January 1 for Jackson Bros. of Chicago. B. L. Hargis of the Hargis Grain Company will become manager of the Lamson company here. No announcement is made regarding the handling of the Hargis company after the first of the year. Jackson Bros., entering this field, have bought the Board of Trade membership of the late Theodore Ismert, paying \$8,750, without transfer fee.

The loss of previous liberal transit privileges on backhaul to California, is regretted at Kansas City. Heretofore the transit rates have enabled operators to handle western and southwestern Kansas grain through Kansas City for California markets; a privilege especially useful for millers, but employed also in grain, particularly coarse grain, movement. The new transit rates affecting the Pacific Coast territory, restrict operations to an area less than 150 miles west of Kansas City—the new rules applying, of course, to Missouri River points.

E. D. Bigelow, assistant to the president of the Kansas City Board of Trade, was 86 years old on December 5. Mr. Bigelow was formerly for a great many years, secretary of the Board. He has a brother 91 years old.

It will be "The Manufacturers Exchange" Building, at Eighth and Wyandotte Streets, when the Board of Trade abandons that structure, and moves into its new home, January 1, at Tenth and Wyandotte Streets. The old building is in the wholesale district, and effort is being made to fill it with offices of representatives of companies, sales agencies, branch houses, etc. So far the types of business entering are largely in metal lines.

H. C. Gamage was chairman of the special committee of the Board of Trade, appointed to handle subscriptions in this industry for the allied charities fund. The entire fund was not reached, but the Board of Trade did its full share, Mr. Gamage securing the quota asked from the Board members and employees. Mr. Gamage was assisted by B. C. Moore and B. L. Hargis.

F. L. Bedell is now in charge of the coarse grain department of the Bruce Brothers Grain Company. He was the representative on the Board of Farmers Union Jobbing Association, something over a year ago.

The annual election of the Kansas City Board of Trade will occur January 6, when a president, a sec-

ond vice-president, six directors and an arbitration committee will be named. The following committee has been designated by the directors to nominate candidates for the offices: L. S. Mohr, H. J. Diffenbaugh, G. S. Carkner, H. J. Smith and F. C. Vincent. The second vice-president, L. A. Fuller, advances automatically to the first vice-presidency, H. C. Gamage now occupying that office.

ST. LOUIS

J. O. MORRISSEY - CORRESPONDENT

UNDER ordinary conditions the demand for wheat would have been very slack during the past 30 days as flour millers have been complaining about sales. The new orders coming in have not amounted to any great volume for more than a month. Buyers were taken by surprise by the exceptionally rapid rise in values and were not able to adjust themselves. In spite of the stagnant conditions Red wheat has continued to advance with leaps and bounds, each week reaching a new high level, and plenty of buyers for all good Soft wheat that is being received in St. Louis market. The receipts of good Red wheat have been scarce and promise to continue so, therefore the advance of more than 20 cents per bushel since a month ago is quite natural. Millers and elevator men feel that good Soft wheat is valuable property and the elevators here are carrying large quantities in storage. In former years there were good receipts of White wheat from the West which had a tendency to hold down the price of the Red wheats but this year those receipts are absent, owing to the fact that the White wheat is being used in the local territory and moving farther west rather than east to St. Louis. The supplies of Red wheat back in Missouri and Illinois has been well cleaned out considering that half the crop year is not yet passed. East of here early in the crop year the Soft wheat markets were considerably under St. Louis but in the scramble for Soft wheat this condition has adjusted itself. On November 12 good Red wheat sold in St. Louis at \$1.63 to \$1.65 and today it brought \$1.85. The shortage of Soft wheat has caused buyers of Soft wheat flour in the market to pick up and store away what bargains are in sight as they feel that it is good property and will bring more money later in the season. Predictions of \$2 for wheat in St. Louis cash market are frequently heard.

Corn lay dormant for most of the month, but in the past 10 days has awakened and advanced rapidly. Receipts of corn in St. Louis have been fairly good. There has been much talk of the great damage to corn but the corn which has been received here so far does not indicate that such is the case. It is granted, of course, that there is damage, but the receipts here have been of good corn showing but a small percentage of damage and are exceptionally good considering what the trade was inclined to expect. The demand has been slack with probably the exception of the local industries who have taken goodly quantities of good corn. The shipping demand has been very dull but this is more or less of a natural condition at this time of the year as the Georgia and Tennessee crops, as well as the Ohio River and Southwestern crops, have to be moved first before the shipping business from this market takes on any great proportions. Inquiry and sales for export have been very light and the demand from feeding sources has not been at all active.

Jobbers and handlers of bran and shorts have been complaining bitterly of the conditions in the trade for the past month. The trade has been stagnant in sales in small volume for prompt and immediate shipment. This condition, according to jobbers, is due to the open season and the hesitancy of the trade to load up on feeds at the present levels. The feeling within the trade is inclined to be toward higher values and some advance in sympathy with other commodities has taken place, but advances were not caused by a brisk demand from the consuming trade. Mills have been offering feed for sale in moderate volume and have shown no anxiety toward moving any large quantities. Offerings have been confined to prompt and immediate shipment with very light offerings for deferred shipment. Mills have been receiving more mixed car orders than is usually the case owing to the smaller buyers not wishing to load up on flour at present figures, buying as much feed as they can get the mills to ship in mixed cars.

P. Gonzales of P. Gonzales & Co., of San Juan, Porto Rico, in company with A. Vividal of the same company visited the Exchange of St. Louis as the guest of Ferd Meyer of John F. Meyer Milling Company, which company Mr. Gonzales represents in the Islands. The visitors have gone from here to Springfield, Mo., to see the plant of the milling company.

On Saturday, November 15, Samuel Plant, president of the St. Louis Merchants Exchange, surrendered his office to Scout Frederick Beardsley Wolf, of the St. Louis Council of Boy Scouts. Mr. Plant issued the

proclamation turning the operation of the Exchange over to Scout Wolf in line with the Community Fund drive program. Scout Beardsley Wolf is a nephew of A. H. Beardsley of the grain firm, Picker & Beardsley, St. Louis. All public offices in St. Louis were filled by Scouts on that day.

R. O. McKenna visited St. Louis for a week in the interest of the milling wheat department of the Hall, Baker Grain Company, making his headquarters with J. M. Chilton, manager of the Hall, Baker, St. Louis office.

Edward J. Gummersbach of the Eberle-Albrecht Flour Company, flour exports of St. Louis, spent a week in New York and Washington on business.

Two young robbers took money and checks amounting to three or four thousand dollars from an open safe in the office of the John C. Roeber Feed & Milling Company, St. Louis. Office employees were forced to retire to the warehouse guarded by one robber while the other rifled the safe and cash drawer.

G. M. Ross of the Ross Milling Company, Ottawa, visited the St. Louis trade during the month; also A. L. Jacobson of the Arnold Milling Company, Sterling, Kan.

Allan Logan, president of the Kansas City Board of Trade, was a visitor on the Merchants Exchange during the month.

The Missouri Grain Company, formerly of St. Louis, have moved their offices to Memphis, Tenn.

The following members have been admitted to membership in the St. Louis Merchants Exchange: Sam P. Cummins, Belleville, Ill.; Roy J. Railsback, of Railsback Bros., Hopedale, Ill.; and Jos. Badenoch, of J. J. Badenoch Company, Chicago, Ill.

Solomon M. East, of Coulterville, Ill., is an applicant for membership in the St. Louis Merchants Exchange, on transfer from certificate held by Martin J. Mullally.

Joseph W. Badenoch, of J. J. Badenoch, mixed feed manufacturers of Chicago called in St. Louis.

Charles Fisher, of Marshall Lathrop Grain Company, Kansas City, visited the Exchange.

Heavy loadings of barges from St. Louis elevators bound for New Orleans were reported during the month. It is nearing the closed season for the barge line and this is expected to be the last wheat moving via barge out of St. Louis until open weather.

Charles Johnson, of the Home Mill & Elevator Company, Mt. Vernon, Ill., and Charles A. Rhode, of Tell City, Ind., were visitors on the floor.

J. Hattersly, of J. Hattersly & Co., St. Louis, flour brokers, announces to the trade the birth of a baby girl which makes him the proud daddy of a boy and girl.

T. E. Price, of the T. E. Price & Co., grain merchants, of St. Louis, has returned from a two months rest at Rochester, Minn., much improved in health.

James Flynn has joined the forces of Flynn Bros. Grain & Feed Company, St. Louis.

LOUISVILLE

A. W. WILLIAMS - CORRESPONDENT

RETAILERS of feed, grain, etc., who held back on their buying in October and November, with the belief that lower prices would prevail, have been doing a lot of cussing, but are having to pay the advanced prices today, which are stiff all along the line. Last month it was predicted by well posted grain men that oats were going to advance, prediction being made on the fact that values were too low. However, a fraction over 12 cents in a month's time is even stiffer than had been expected. A few houses have made some money on oats.

Movement as a whole has been quite fair, and the elevators are still fairly well loaded with grain, although storage is easier to secure than it was 60 or 90 days ago. F. C. Dickson, of the Kentucky Public Elevator Company, reported about 50,000 bushels of grain on hand, of which 400,000 bushels are on long storage. Daily handlings are running from 12 to 25 cars.

There is a considerable amount of corn drying business available at this time, as while corn is of unusually good quality, there is 3 to 4 per cent excess moisture which is being dried out. While it had been claimed that early frost would result in a

lot of poorly matured corn, corn has really matured much better than had been expected, and very little poor quality stuff has been handled here so far.

Edward Scheer, of the Bingham Hewitt Grain Company, remarked that the strong markets over the past few days had resulted in a little slowing up in country business, but that there was a fair amount of immediate shipment business, where retailers had to have grain. There is also a fair inquiry from country mills for wheat.

Henry Fruechtenicht, feed and grain dealer, operating several small elevators here, reported that business was fair as a whole, but in other than dairy business there was no large amount of business available.

The local market is showing wheat at \$1.75 for No. 2 Red; oats, No. 2, 62 cents; No. 3, 61 cents; corn, No. 2 White, \$1.27; Yellow, or Mixed, \$1.25; No. 3 grade, at 2 cents under No. 2. All corn is new kiln dried, old corn being very scarce. There is no rye movement through Louisville, which is not a consuming or handling market.

The feed market is firmer with bran in sacks at \$34 a ton; mixed feed, \$36; middlings, \$37; hominy feed, \$47 and cracked corn, \$50. The demand for feed has been showing some improvement, due to high grain prices.

Hay prices have been a shade weaker due to heavy offerings and good roads for moving. No. 1 Timothy is \$20; No. 2, \$19; No. 1 Mixed, \$18 and \$19; No. 2, \$17; No. 1 Clover, \$19; No. 2, \$17.50 and \$18; wheat and oat straw, \$12; rye straw, \$15.

Flour prices have been advancing with wheat, latest quotations on short patent Winter wheat flour being at \$9.65; long patent, \$8.45; and first clears, \$7.65. An advance of 25 cents a barrel was posted on December 8. The differential between long and short patent flour, which had been 80 cents, has been increased to \$1.20 a barrel over the month, due to the fact that the differential was too short for free movement of long patent.

G. A. Breaux, vice-president of the Ballard & Ballard Company, Louisville, is spending a few days with his brother, Locke Breaux, at New Orleans. S. T. Ballard, president of the company, is spending the winter at Eau Gallie, Fla., trying to recover his strength from an operation last spring for appendicitis.

One of the most disastrous stable fires in Louisville in years was on November 27, when the boarding stable of Crutcher Bros. was burned, a total of 47 head of horses and mules having been burned, and a number of wagons, mostly property of Main Street jobbing houses. While it has been expected that some of these would replace the burned stuff with auto trucks, it is reported that wagon makers have received a string of orders, as the jobbers have found that on short hauls in the down town section the wagons have certain advantages over trucks.

Robbers recently visited two offices in Paintsville, Ky., including that of John K. Butcher, feed and grain merchant. About \$1,500 was taken at the two establishments.

The Walker Meal & Feed Company, Hickman, Ky., and Hickman Milling & Feed Company, were destroyed by a fire on November 14, total loss being placed at \$40,000. The two companies occupied the same building.

R. B. Hayer, of Hodgenville, Ky., on November 18, lost a feed and grain warehouse, in a blaze which also destroyed the wholesale grocery warehouse of his brother, D. G. Hayer and other buildings. Total losses were reported at about \$50,000.

DENVER

T. V. KIRK

CORRESPONDENT

BUSINESS in this territory continues to be good considering weather conditions and the fact that many buyers are withholding their orders until after inventory time. The mills are operating practically full time.

On the night of November 27 a fire started in the protein laboratory of the Colorado Milling & Elevator Company. About \$600 damage was done before the fire could be extinguished.

J. W. Cook of the Westman Commission Company recently departed for an extended tour of Europe.

At the Colorado Pure Seed Show, held at Colorado Springs, November 17 to 20, the Denver Grain Exchange offered a beautiful loving cup which stood about

two and one-half feet in height to the exhibitor of the best 10 ears of corn in the state. This trophy was won by Raymond Condon of Platteville, Colo., on a sample of Minn. No. 13.

Recent visitors at the Denver market are E. M. Elkins of Wallingford Bros., Wichita, Kan.; C. W. Potter, Albuquerque, N. M.; J. D. Collins of Albers Bros., Tacoma, Wash.; R. T. Johnstone of Portland, Ore.

GRAIN NEWS FROM BOSTON

By L. C. BREED

According to advice received by the local press, it is believed that the depression in agricultural prices has been checked with the result that New England farmers will be placed in a more favorable position for the purchase of grain supplies than they have been for the past two years.

The agitation of the matter of the plight in which New England ports find themselves is still going on, and, according to the Boston Chambers' Maritime Bureau, it is chargeable to the Shipping Board. It is alleged that prior to the war, the ocean rates from this port were lower than those of Philadelphia and Baltimore, with the result, that in spite of the rail differential enjoyed by these two ports on export and import freight traffic, the through rates from the West were approximately the same. The claim is made for rates equal to New York and other ports.

W. H. Day, who for a number of years has served as traffic manager for the Lynn (Mass.) Chamber of Commerce, has become the manager of the transportation bureau of the Boston Chamber of Commerce, to fill the place of W. H. Chandler who resigned to take a similar position with the Merchants Association, New York. Prior to his connection with the Lynn organization, Mr. Day had been in the freight department of the Boston & Main Railroad. He is serving his second term as president of the New England Traffic League.

Lewis H. Beaver of Norwood, Mass., head of the Beaver Coal & Grain Company of that town, died suddenly at the N. E. Hospital in Boston, in his sixty-third year. He was born in Freeport, Pa.

Elmer Dawson, flour merchant of Boston, has served the state for four years as a member of the legislature. He felt warranted to decline longer service on the ground that his business required his full time.

Though of late more seasonable weather has prevailed, the demand for feed is somewhat slack. Stocks are exceptionally light. New England trade is mainly being supplied from Buffalo with moderate shipments of Canadian.

There is a slow demand for hay and while prices are not openly unchanged, there is considerable pressure to sell on the part of receivers. Extreme top hay, as usual, is scarce; medium and lower grades are showing some accumulation. Straw is ruling quiet but fairly steady. Receipts for November hay, 324 cars; straw, 16 cars.

At the annual meeting of the Grain Board, the following members were chosen to serve on the Executive Committee for one year: Geo. W. Collier, flour; Eben A. Hall, grain; Charles A. Hardy, grain; Arthur F. Hopkins, grain and flour; Herbert A. Weeks, grain; William M. Wise, flour. For two years: Henry A. Bascom, hay; George H. Hopkins, grain; Henry Jennings, grain; John J. King, grain; A. S. MacDonald, grain; Dexter F. Parker, grain and feed. A meeting of the Executive Committee is called for December 8 for organization and the election of chairman of the Board for the year 1925.

Receipts of grain at Boston during the month of November were as follows: Wheat, 129,675 bushels; corn, 5,500 bushels; oats, 393,629 bushels; rye, 743,575 bushels; barley, 76,025 bushels; malt, 3,775 bushels; mill feed, 46 tons; cornmeal, 730 barrels; oatmeal, 10,037 cases.

Among the visitors to the Chamber, outside of New England, during the month of November were the following members were chosen to serve on the Executive Committee: Paul Hubscher, Marseilles, France; Orin Dowse, Chicago, Ill.; Charles F. Miller, Lancaster, Pa.; Clayton Sheedy, Baltimore, Md.; Henry P. Hoffstat, Pittsburgh, Pa.; E. S. Woodworth, Minneapolis, Minn.; Harry Patten, Chicago, Ill.; H. P. Bell, Denver, Colo.; J. D. Hurlbut, Toledo, Ohio; W. A. Coates, Montreal, Quebec; H. M. Stratton, Milwaukee.

FEDERAL WAREHOUSE ACT

Hundreds of millions of dollars are being loaned to co-operative marketing organizations and individual farmers on the basis of warehouse receipts issued by warehousemen licensed under the United States Warehouse Act, reports H. S. Yohe of the United States Department of Agriculture

which is charged with administration of the Act. Three wheat growers associations, Kansas, Southwest, and Indiana, are making use of it.

The Act now provides for the issuance of warehouse receipts for cotton, wool, tobacco, grain, farmers' stock peanuts, late potatoes, broomcorn, dry beans, and dried fruit. Any public warehousemen who can establish to the satisfaction of the Department of Agriculture that they are trustworthy, competent, financially responsible, and have proper storage facilities, may be licensed to store these products.

So favorably does the banking fraternity view the receipts issued by the Federally licensed warehousemen that many banks accept the receipts as collateral without question, Mr. Yohe says. The intermediate Credit banks, the Federal Reserve banks, and many leading commercial bankers have expressed preference for the receipts. Co-operative associations which store their products with warehousemen licensed under the Act obtain a preferred receipt which gives them a wider field of credit and frequently better interest rates.

RUSSIAN EXPORT PROSPECTS

The combined area of winter and summer grain crops in Russia in 1924 appears to be approximately 6 per cent greater than in 1923. The increase over last year has been variously estimated during the season at from 6 per cent to 10 per cent, but the higher estimates, which came out chiefly during the spring and early summer, were doubtless too optimistic. The winter killing was heavy owing to the unusually severe weather, and the proportion of abandoned acreage reclaimed by summer planting was not known until later in the season.

The statement released by the "Gosplan" in September placed the harvest area at 6 per cent above 1923 for entire Russia but made no estimate for individual districts. The hot waves and drought which struck some sections of the country, seriously interfered with the development of the crops. From the prospect of a large surplus the country has been reduced to a possible deficit. Difference of opinion is common in the country itself regarding the advisability of any exports whatever. Uncertainty regarding the actual amount of the harvest, the unfavorable price situation, difficulty of obtaining grain stocks from the peasants and the high costs of exports are factors which contribute to confusion in the situation.

The latest estimates of the 1924 harvest place it between 43 million short tons and 48 million short tons, 45 million short tons being the figure generally accepted as most nearly correct by the grain trade and economic writer. *The Finance Commissioner of the Soviet Republic, Ssokolnikow, who is recognized in Germany as one of Russia's leading economic experts, estimates the harvest at 45 million short tons. He states the noteworthy conclusion, however, that the question whether Russia's harvest is large enough to permit of export cannot be decided before the spring of 1925.

He takes the position that the surplus, if there is any at all, will remain uncertain until the extent of the relief necessary in the drought districts is known. Exports during this time he regards as dangerous to the welfare of the country. The Russian Government is very much afraid of rising prices, which would lead to higher operating costs in its business undertakings and would tend to limit export possibilities. Any substantial grain exports during the near future would inevitably add to the upward tendency of grain prices and are therefore discouraged.

Sokolnikow points out that the chief function of the Government grain reserves which are on hand or may be obtained, is to equalize prices and to prevent if possible a further rise. A disorganization of the country's grain market would have a serious effect upon the entire economic structure.

*Since the preparation of this report unofficial statements have been received quoting an estimate by the Russian Commissariat of Agriculture of 46 million short tons harvested for the 1924 crop.

Champions Among Grain Growers

Judges at Sixth Annual International Hay and Grain Show Select Winners to Receive Large Premiums Offered

FARMERS and grain growers of several continents brought to the sixth annual exhibit the largest number of grain and hay entries that has ever been shown. The Hay and Grain Exhibit opened November 29 at the Stock Yards, in Chicago, and was held in the large hall at the end of which was the mammoth corn arch that attracted the admiring attention of the attendance. The added attraction caused by the presence of President Coolidge one day during the show brought out an unusually large number of people.

More than 1,280 premiums were offered in the various classes, including a \$10,000 premium list offered by the Chicago Board of Trade. For the encouragement of exhibitors from Canada, the Canadian Seed Growers Association established a fund for additional special prizes to be awarded to Canadian winners of sweepstakes and first prizes at the International. The increasing interest in the successive grain shows may be judged from the fact that the entries have increased annually from 1,500 in 1919 to 5,049 in 1923.

Canada won the wheat championship of North America for the thirteenth time in 14 years of competition when the exhibit of Marquis wheat entered by J. C. Mitchell, of Dahinda, Sask., was awarded the grand championship and sweepstakes. This was the third time that Mr. Mitchell won first honors. He won in 1919 and 1920. His prize winning wheat weighed 64.6 pounds to the bushel, and

crops, having secured the grand and reserve championship honors—the latter being won by L. H. Laylin, also of Mason, Mich., on mixed hay, Clover and Timothy.

The Kansas State Agricultural College team won the intercollegiate crop judging contest. Their score was 3,983. West Virginia had second place with 3,828 points, and Michigan was third with 3,803. In winning this contest the Kansas college also won a \$250 scholarship for their school, offered by the Pullman Company. The Kansas team was composed of J. E. Norton, O. L. Norton and Glen Reed and was coached by J. W. Zahnley, associate professor of farm crops.

The grand champion 10 ears of corn was R. L. Heilman, Hope, Ind. Next place to his Champion White, was Reserve Yellow, which went to J. E. Mummert, Astoria, Ill. The United States and Canada were divided into eight regions on account of different climatic conditions, and sweepstakes in regions were awarded as follows:

Region	Color	Name, P. O. Address	State
1	White	John Henderson, Cokato.....	Minn.
2	White	B. R. Cohoe, S. Woodslee, Ont....	Can.
3	Yellow	N. H. Krizer, Rose Hill.....	Iowa
4	Yellow	J. E. Mummert, Astoria.....	Ill.
5	White	S. G. Rogers, Gainsboro.....	Tenn.
6	Yellow	Ben Jones, Atwood.....	Colo.
7	Yellow	George M. Kirkpatrick, Wingate, R. I.	Ind.
8	White	R. L. Heilman, Hope	Ind.

Sweepstakes, single ear, Champion Yellow, went



GENERAL VIEW OF HALL CONTAINING SEED EXHIBIT AT THE HAY AND GRAIN SHOW

he will realize \$675 in prizes, made up of \$500 from the Winnipeg Board of Trade, \$150 from the Saskatchewan Government and \$25 from the grain show. This is said to be the largest sum ever realized for a single bushel of wheat. In addition, Mr. Mitchell wins the Chicago Board of Trade cup. There were 110 other wheat growers in the competition.

The Canadian Pacific Railway is presenting the winner an award of \$100—the award for highest scoring in Hard wheat at the International in 1924. The same railway is also awarding him a trip abroad with his family.

For the first time in six years the oats sweepstakes left Canada and came across the border. The judges awarded this championship to L. E. Peterson, of Victor, Mont. The champion soy bean grower of the world was named in the person of Chester R. Boland, of Paris, Ill. A. W. Jewett, Jr., of Mason, Mich., was declared champion hay grower of the world with his showing of Alfalfa. This makes the third successive year that he has carried this same honor, having won it last year and in 1922 on Timothy hay. Michigan ranks first among the hay

to Frank W. Lux, Shelbyville, Ind., and Reserve Yellow, to Harve Ruth, Astoria, Ill. In commenting on his success with the prize corn, Mr. Heilman gave out an extensive interview, in which he said among other things:

On my farm at Hope, Ind., I grow about 80 acres of corn each year, and for the last 10 years I have averaged about 80 bushels of corn to the acre. The corn which won the title of king for me came from a field of 35 acres which averaged 80 bushels to the acre. I have just finished cribbing 2,800 bushels of corn from this field, and the quality of the crop is as good as any I have ever grown.

The field was in Alsike Clover last year. I broke it in March, plowing about seven inches deep. After dragging and double disking, both ways, we planted it from the tenth to the fourteenth of May, the rows 13-3 feet apart and 18 inches in the row. I gave this corn four cultivations, the first one medium and the other three shallow. At planting time, we applied 125 pounds of 1-6 fertilizer in the row. The soil is a black loam, second bottom sand.

In this year's show there was the usual increase in the exhibits of small grains and small seeds, but a decrease in the total number of corn samples, due to the unfavorable season in the corn belt. The quality of the corn samples was, however, excep-

tionally good, which is perhaps due to the fact that veteran exhibitors are learning more about the growing and selection of corn. There was not an exhibitor who had won a high place in the five previous grain and hay shows who did not have entries this year.

Twenty-six state and provincial official representatives attended this year to see that samples were properly displayed and placed in the show. Educational exhibits were sent from the agricultural experiment stations and colleges of Indiana, South Dakota, Michigan, Nebraska, Wisconsin, Illinois, Kentucky, Iowa, Idaho, Montana and Saskatchewan, besides the extensive exhibits of the Federal Department of Agriculture.

AMERICAN BUSINESS A WORLD STANDARD

Outposts of American business are setting up as a worldwide standard the ethical code embodied in the Fifteen Principles of Business Conduct formulated and adopted by the Chamber of Commerce of the United States at its last annual meeting, and also adopted by the Grain Dealers National Association at its recent meeting in Cincinnati.

This code, which declares that "the foundation of business is confidence, which springs from integrity, fair dealing, efficient service and mutual benefit," has been ratified by American chambers of commerce at Shanghai, China; Rio de Janeiro, Brazil; Havana Cuba; Naples and Milan, Italy; Port au Prince, Haiti; and the Chambers of Commerce in Hawaii, the Philippines and at Nome, Alaska.

Three hundred and ninety commercial organizations and trade associations in the United States have adopted the code as their own and the number is increasing daily as meetings of these organizations are held.

Approximately 5,000 firms and corporations in the United States have also formally adopted the code.

Steps are under consideration by some American commercial organizations in foreign countries to bring the code to the attention of the chambers of commerce of these countries in order that the 15 principles enunciated by the Chamber of Commerce of the United States may serve as an international guide for business conduct, the world over.

SIDE-LINES ON COMMISSION

By TRAVELER

A large number of elevator men still fail to take advantage of the additional profits to be had by handling side-lines, although they are aware that many of their neighbors are not only reaping a nice profit from these additional lines, but are also increasing their grain receipts at the same time.

There are a number of reasons why these old elevator men still adhere to the old-fashioned idea that a country elevator is merely for the purpose of receiving and shipping grain. The chief reason, however, appears to be an unwillingness to invest a considerable sum of money in a stock of varied merchandise which may not move for some time. They have been used to a quick turn-over in the grain business with a ready market at all times, and the change to waiting until a customer comes along to buy their goods is viewed with alarm by most of them.

There is, however, a way to get around this, and thus enter the side-line game experimentally. Instead of investing any money at the start, it is possible to make arrangements with any number of distributors of various lines to handle their goods on a commission basis. Take gasoline, for instance. The companies will set up a tank and pump at their own expense. Tires may be handled on commission, and all one needs is to carry a few samples. Both of these commodities are needed daily by farmers. Many other automobile accessories may be handled in the same way. Then there are washing-machines, collapsible brooders and corn cribs, self-feeders, gas engines, etc.

In fact, there are lines without number, all of which may be handled on commission, either by

sample or through catalogs, and the distributors will gladly furnish plenty of advertising matter.

Any elevator man has the best of opportunity for starting a wonderful brokerage business in this way, and the more lines he has, the more one will help the sale of the other. As his business grows, he may from time to time add a stock, and thus serve his customers more quickly; but in the beginning, and until he has tried out the various commodities, he can stick to the commission plan as

the safest and most economical method extant.

It is one way to demonstrate what can be done with side-lines in the elevator business, and it is also a plan which may be carried out with every little investment on the part of the elevator man.

There is no longer any question but that side-lines are absolutely essential to the proper conduct of the elevator business, and the sooner the elevator man takes some means to prove this to his satisfaction, the better he will be off in every way.

Changes in the Relation of Grain Markets

A Study of the Trends in the American Grain Trade with Special Reference to Changing Conditions and Their Reasons

THIS year, the wheat market, like the crop, sprang a series of surprises. Inside of three months—June, July and August—prices advanced 34 cents, with a decline of 14 to 15 cents and then a rally. Cash prices for No. 2 Hard Winter wheat advanced from \$1.05% on May 8 to \$1.47½ on October 14. The unfavorable weather which brought calamity to Canada has been a blessing to the American producer. This marked advance was a natural result of the law of supply and demand.

It is with these preliminary facts that Rudolph A. Clemen, economist of the Illinois Merchants Trust Company, Chicago, commences a booklet on the grain trade, entitled "Is the Grain Trade Changing?" He quotes the address of Gen. Dawes at Lincoln, Neb., and concludes his excerpt from the address by quoting the sentence, "It should be emphasized that all the factors contributing to the present price level of grain are temporary in their nature and cannot be counted upon in the future." Mr. Clemen goes on to say:

Certainly there are enough other interests in grain to help to balance the economic appecart. In the marketing of grain the interrelationship of business is particularly pronounced and is of vital importance. This is due to the widespread interest in wheat. For, as Frank L. Carey, president of the Chicago Board of Trade, has shown—

- (1) The farmer has his interest,
- (2) Then come the interests of the country grain buyer,
- (3) The terminal elevator owner,
- (4) The railroad that moves the grain,
- (5) The telegraph and telephone companies that daily transmit thousands of orders for the purchase and sale of grain and who lease by the year thousands of miles of special wires used solely for transmitting grain quotations and market information;
- (6) Then there are the miller, the exporter, the manufacturer, the baker, commission merchants and the banks,
- (7) Then every individual consumer of wheat.

And our present grain marketing system is a direct result of the co-operation of these branches over three-quarters of a century. Every link has its purpose.

A few statistics will aid in picturing the interrelationship of the grain industry and other lines of business. Chicago is the gateway to a vast garden. This garden sprawls out over an area wide enough to contain a score of small nations. It produces a large portion of the world's foodstuffs. In a year it sends to Chicago 400,000,000 bushels of grain. In a single day it has sent to Chicago 2,000,000 bushels of wheat which would fill a train 14 miles long. In 65 years 13,000,000,000 bushels of grain have been received and 10,000,000,000 bushels shipped out of Chicago.

The war-time demand stimulated the American wheat acreage from 46,000,000 acres, the average for the period of 1909-1913, to nearly 76,000,000 acres in 1919. A substantial decline since then still leaves the wheat acreage 13½ per cent over the pre-war period.

With all this, fluctuations have gone along—preceding or following in a continuous circle—increases or declines in prices. This again has been the occasion for the wheat trade coming into politics.

The grain exchange, like the railroad and the bank, has served as an easy target for the politician. Dissatisfaction is human. And grain prices have always been too high for the consumer or too low for the producer. In either case the politician has profited by feeding the flames of discontent.

During the last few years this discontent among grain farmers which began with post-war price inflation has been quite pronounced. It has been encouraged by self-seeking politicians to the actual detriment of the dirt farmer. This was plainly shown during the recent Congressional session when threats of un-economic laws caused a turmoil that kept the commodity markets in a state of depression. Large investment and speculative support, essential to a broad and liquid world market, was completely absent.

Then Congress adjourned. The proposed un-economic laws had been defeated. Business at last real-

ized that it was to be let alone. At once all commerce, including commodity markets, began functioning in a natural, normal way. Confidence replaced pessimism. Facts again prevailed over fears. Grain prices at once advanced. From the time Congress adjourned grain price increases went on. Moreover, this price advance has taken place in the face of favorable crop prospects virtually throughout this country and the Canadian Northwest. What better proofs were needed of the quick response of the interrelationship of business when unhampered?

Due to the hampering of the grain trade in recent years by legislation and political controversy, it has been declared that the grain business is changing, that the Chicago Board of Trade has been dealt a deadly blow from which it can never recover, that new methods of marketing are being worked out which will do away with the necessity for the Board of Trade and other grain exchanges through the elimination of futures trading. Much of this is not true. But at the same time, so widespread is the misconception of the grain trade's functions and what actual changes are taking place and what their causes are, that a plain and careful statement is called for.

He next discusses changes which are occurring in the grain trade. Reference is made to the fact that Chicago is declining as a grain trade center; and the statement is quoted that because of its advantages in lake and rail shipping rates, it is receding into a concentration point for export trade. Many of the smaller markets, such as Cedar Rapids, Burlington, Des Moines, Sioux City, Indianapolis and others, are developing at the expense of Chicago and now are rather important factors in grain marketing.

There is discussion of the assertion that there are too many commission merchants in Chicago for the volume of business. While about 45 commission firms operate on the Chicago Board of Trade, 80 per cent of the business is handled by four companies. The writer of the booklet continues:

The over-supply of commission merchants has probably been responsible for the "to arrive" commission rule which is keeping grain away from Chicago. As the rule is now applied a commission is charged on every car of grain received in Chicago, whether shipped on consignment, to arrive, or f. o. b. country station. This rule has placed Chicago at a great disadvantage in drawing country shipments. Other markets which do not have such a rule have the advantage of one or two cents per bushel. Along with the Federal grain grading supervision, the "to arrive" commission rule has been responsible for the rapid development of the small markets to which reference has already been made.

This situation has been recognized by some other primary markets, for example, Kansas City. The Kansas City Board of Trade, therefore, July 19th rescinded the "to arrive" rule on grain. Many grain men and local and outside mills were opposed to the rule on the ground that it allowed other Southwestern markets to overbid Kansas City. Members of the Kansas City Board of Trade were forced to post their bids to the country on the trading floor of the exchange immediately after they were made. Local commission houses then could accept them, adding 1c a bushel to the price as commission. The Kansas City grain trade expects that the repeal of the rule will allow mills that are members of the Board of Trade to draw more good wheat direct from the country without going through the local elevators.

Other factors which the article analyzes as helping other places at the expense of Chicago include commissions which appear too high, the fact that grain buyers are too few to keep the market in a healthy and active condition and other less important items. The concluding paragraphs are as follows:

Many of the elevators in Chicago are owned by railroads and operated by grain firms under lease. The purpose of the railroad in building elevators is, of course, to get shipping business over the road. The

leases are, therefore, usually given to the firms which will ship large volumes over the line. The railroad makes little, if any, money from the lease itself, but looks to increased freight traffic for compensation. The road, therefore, would not consider a lease desirable if the house were not kept in operation.

While little money has been made through the operation of elevators during the past year, some firms have made a fair profit from storage. Elevators purchased oats, for example, after harvest at 38 cents and sold May futures against them. Not being able to merchandise the oats during the winter, delivery was tendered the holder of the option in May. The purchaser, under the rules of the Board of Trade, is obliged to pay the storage charges, which are about one cent per bushel per month. Thus, the profit of the elevator operator was about seven cents per bushel without a great deal of operating expense, except the necessary overhead, including interest on the money involved.

To summarize, the relation of the different markets in the grain trade is changing due to economic causes. Some of these causes are:

1. The grain trade is unsettled, particularly in Chicago. This is due to too many merchants, development of Federal supervision of grain inspection, and top-heavy terminal facilities, which are the fundamental factors for the unrest.

2. Few grain enterprises up to the recent price rise were making money. Some were making an even break. But the majority were losing money and will sooner or later drop out of business. This situation is certain to throw facilities, such as elevators, and expert talent on the market at lower prices than now prevail.

3. Chicago is developing into an export concentration point rather than expanding as a domestic distribution center. Lake and rail rates are such that elevators not located on water fronts are practically useless during a considerable part of the year. The one thing that will save Chicago as a premier grain market of the country is the development of the St. Lawrence Deep Waterway project which will put ocean-going vessels at her docks.

Two other ways in which the grain trade is changing await consideration. The first of these is a change in the method of financing. The other change is in the method of organizing the flow from producer to consumer through the rise of co-operative grain marketing.

THE WHEAT STEM SAW FLY

In the Spring wheat states and in western Canada the Wheat Stem Saw Fly has caused much loss to both wheat and rye in past years; and this year has been found in Manitoba and Saskatchewan. No variety of Spring wheat seems immune from attack, and Durum as well as rye have suffered. At the time the wheat is ready for harvest the larva of the fly which lives inside the stem, is at a point about even with the ground. It cuts a circular groove around the inside of the stem, so that it easily breaks off when the wind blows. The fact that it breaks off near the surface is unfortunate since the binder does not get these stalks when the crop is cut. As a strong wind will blow down every diseased stalk, when a field is found to be infected it should be cut before it becomes dead ripe.

CLIMATIC DIFFERENCES IN WHEAT

While sound wheat has the same botanical features wherever found, nevertheless there are differences in structure and chemical content which vary considerably according to climate, soil and variety of wheat. In a recent article published in *Milling*, the writer says that a damp climate, having no extremes of heat and cold, will produce a thick-skinned grain, with excessive moisture and an endosperm of high starch content. Such grain (we presume he had British wheats in mind) is of good bulk but soft and immature and generally classed as weak wheat. To take the other extreme—a tropical country, with low rainfall, and practically no winter; this will tend to produce a harsh, hard wheat. The percentage of gluten may be fair but deteriorated in elasticity by excessive dryness. The skin will be thin but rather shrivelled; such wheat requires a great deal of tempering before its conversion into flour. Therefore, deep, rich soil, moderate rainfall, snowy and severe winters, and bright, genial summers with a brisk harvest season are most favorable for the growth of strong, good yielding wheat.

ASSOCIATIONS

OHIO GRAIN DEALERS HOLD FALL MEETING

The annual fall meeting of the Ohio Grain Dealers Association was called to order by President S. L. Rice, at the Chittenden Hotel, Columbus, Ohio, on November 18. A large attendance was present and the interest in pending topics was general. After the roll call, the president addressed the meeting briefly.

He recalled the slump which was in effect when the previous meeting of the Association was held, and congratulated the membership on the fact that conditions had greatly improved. He made reference to present attempts in some quarters to revive the McNary-Haugen Bill, and urged the necessity for keeping the organization intact for the meeting of future issues. Mr. Rice went on to say that boosting the membership of the Association was a paramount issue, and that if it could be doubled in the next year it should be done.

He next referred to the seven group or regional meetings which had been held in different localities throughout Ohio in the preceding month; and he expressed a curiosity as to their effect, if any, on the regular fall meeting now being held—the question of whether they made it larger or served to deduct from the possible attendance. He next



PRESIDENT SAMUEL L. RICE

called for some expression from those present in regard to the benefits of the group meetings.

C. E. Groce, of Circleville, said that he had been present at the meeting at that point and it was the first they had had. He said he felt that it was beneficial and that it was hoped that the dealers of the vicinity could be got together at Circleville again.

In the absence of the temporary chairman of the Marion meeting, President Rice commented on that meeting, saying that those who were present were entertained royally, and about 25 or 30 were present. The general opinion seemed to be that they were anxious to have another meeting. A brief comment was then offered relative to the meeting at Norwalk, after which H. G. Pollock came forward to report on the Van Wert meeting.

He said that approximately 100 notices were out and 80 dealers came to the banquet. He characterized the gathering as a first class meeting, and said it had united the element that had been playing havoc with grain profits in that area, and that it had been successful in cementing together the farmers' co-operatives in the area with the dealers who were members of the Association. Mr. Pollock said he considered this one of the biggest points and that he believed the local meetings to be one of the best things the Ohio Association has promoted.

D. E. Horn, of the E. A. Grubbs Grain Company, spoke briefly in regard to the meeting at Greenville. He said there were 88 at the local meeting, and that it was a decided success. He said both Columbus and Cincinnati were well represented, and he stressed the importance of the social features of the meetings.

President Rice said that 35 were present at the meeting at Wauseon, which was held Halloween night. He alluded to the annual dinner held at Wauseon and the benefits derived from the social contact.

E. T. Custenborder, of Sidney, enlightened the

meeting as to what transpired at the meeting at Piqua. Having referred to the economic and social value of the local organizations, he went on to say that 63 were present at the banquet, which was the twenty-sixth local affair of the sort. He said that the farmers had been invited, and that prior to doing this the farmers were suspicious. The bankers were also invited, and Mr. Custenborder said, "I don't believe there is a section in the state where you can find elevator property as high as in this region." He said he knew of an elevator in a good town which was on the market two years at a little over one-half the price of similar property in his territory. He concluded by saying he would not give 25 cents on the dollar for an elevator in unorganized territory.

Among the subjects which Mr. Custenborder named as having been discussed at the Piqua meeting were frozen credits, which he asserted were the result of permitting the abuse of the credit system. He asked how many were receiving interest enough on book accounts to pay interest on notes at the bank. He also mentioned the discussion that was had relative to merchandising grain and the use and operation of automatic scales.

F. E. Watkins, of Cleveland, former president of the Grain Dealers National Association, was present, and was called upon for some remarks. He said, in part:

I always enjoy coming to these fall meetings. They furnish a point of contact where I can meet local dealers and hear the latest news on the corn situation. After listening, however, to what has been said about the local meetings, I'm just a little jealous at being unable to attend them. I'm sure they are on the right track.

When I was active in Illinois we had a local organization with a close working relation between the shippers. We used to get together and talk over our trouble and iron out our difficulties.

"In union there is strength." Most of you have heard that old legend about the father who gave a bundle of sticks to his sons and instructed each to try to break it. Each failed. Then the father untied the bundle and rapidly and effectually broke each stick in the lot. In this way he taught them the value of unity and organization.

In just such a way must the grain dealers be organized if we are to protect ourselves from unfavorable legislation. Individual grain dealers must hold together the local organization and the local organizations the state association, which is further bound into the national body.

The failure of the McNary-Haugen Bill should have taught public officials a lesson. Its defeat was a direct repudiation of bureaucracy. But we are not yet free from the invasion of Government into private business. In spite of the innate common sense of the American people, as shown in the last national election, such problems will come again and we still need the organizations of grain dealers.

A lot of grain men seem disinterested in their state association. That reminds me of Secretary Smiley of the Kansas Association, which is one of the most powerful state organizations in the country. Secretary Smiley has been connected with grain dealers association work longer than any other man in the country with the one exception of "Uncle Joe" McCord, of your association.

Mr. Smiley talked for over two hours to a Kansas grain dealer once in an attempt to get him to join the state association. Finally he gave up. As he turned to leave, a thought occurred to him and he said to the dealer:

"Do you carry fire insurance?"

"Yes."

"Why?"

"To protect my property from fire."

"Well," said Mr. Smiley, "I'm offering insurance on your business." The fellow saw the point and signed an application.

The percentage of Ohio dealers belonging to their state organization is not so large as it is in states further west. It can stand a lot of new members. If a campaign for members is started it is the duty of every one of us to get behind it and prepare to help.

The president next called upon "Uncle Joe" McCord, as one who had attended all the group meetings held in Ohio. Mr. McCord's remarks related chiefly to the necessity for increasing membership, and he made several concrete recommendations along this line.

D. J. Schuh, executive-secretary of the Cincinnati Grain & Hay Exchange, was then given the floor, and he talked for a short time on the benefits being derived from the state association. He also urged the country dealers to visit the terminal markets once in a while.

President Rice closed the morning's business by announcing that information regarding the corn crop would be the principal order of business in the afternoon. The meeting then adjourned to the Rose and Gold Room of the Chittenden Hotel for the fellowship luncheon, and business was suspended till two o'clock in the afternoon.

T. J. Hanley, of the milling firm which bears his name, at Coshocton, said grace at the luncheon, and a colored quartette from the Ohio State Penitentiary provided music during the luncheon. When the meal had been concluded, C. O. Garver, of Columbus, introduced Dr. D. F. Rittenhouse, well known as the "radio preacher of Columbus" as the speaker of the occasion. His address was based

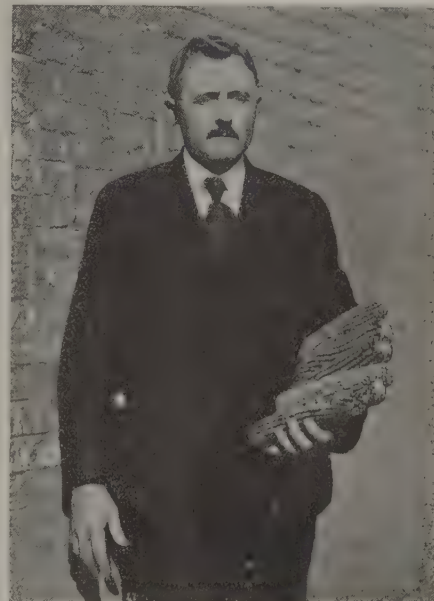
on his observations and experiences while in Europe during the preceding months, and he described conditions as he had seen them in detail. When he had concluded, the president thanked him, and the membership returned to the convention hall for the final session.

At the opening of the afternoon's proceedings, Mr. McCord announced that the next meeting would probably be held the last week in June, and that the invitation of the Toledo Produce Exchange to hold it in that city would probably be accepted.

William Meyers, of Toledo, representing the Great Lakes Regional Advisory Board, spoke next, confining his remarks for the most part to transportation issues.

H. G. Pollock, of Middlepoint, then gave detailed instructions on how to prepare corn for shipment. He said that it was necessary that preparations commence on the farm, in order that the corn be husked clean and delivered to the grain dealer in a clean condition; rotten, imperfect and immature ears should be removed and consumed on the farm. Next, it should be put in an outside crib where air can reach it, till a carload is accumulated. When loading the car he recommended the old type of scoop shovel, though he said that with existing wages it had grown too expensive, making the use of proper mechanical equipment more advisable. He warned against sending corn through the elevator like other grain, and said that there should be no chains in the drag to break and shell the corn. The drag should have thin slats that carry the corn into the car, and a blower fan at the end of the drag will blow out all the dirt and thus get the corn into the car in a clean condition.

He counselled those present to crib the soft corn



H. G. POLLOCK

and dry it; and said, "If the farmer doesn't want to keep it, take it yourself. Spend \$500 on a plot of land near the elevator, stock it with hogs, and feed them the soft corn. They'll make a profit for you." In conclusion, he urged the importance of keeping an accurate and reliable count when loading. His remarks were followed by a general debate and he answered numerous questions.

E. T. Custenborder said that great men were privileged to differ in their opinions, and that accordingly he would take issue with Mr. Pollock in regard to shipping ear corn. He said that he could not justify the economic waste in shipping that way and therefore thought it preferable to ship shelled corn and not ear corn. He said he saw no good reason for paying freight on corn cobs.

In concluding the corn question President Rice remarked that as everyone was now fully advised regarding handling corn, the only remaining issue was, "Where are we going to get it?" This was followed by numerous comments, mostly disparaging, as to the quality and quantity of the present corn crop. Secretary McCord followed these comments by reading the United States Department of Agriculture's report on Ohio corn. It showed an average yield of 26 bushels to the acre, 56 per cent merchantable, and 3.6 per cent the stock of old corn on the farms. Mr. Pollock gave his opinion that one-fifth as many cars of corn would be handled this year as last year.

Short talks were made by T. J. Hanley, of Coshocton; Fred Mayer, of Zahm & Co., Toledo; F. L. Watkins, of Cleveland; C. A. Hiegel, of Leipsic; and E. W. Pontius, of Lewisburg.

The meeting adjourned late in the afternoon.

The registration of attendance included the following names:

C. F. Wagner, Fostoria; L. W. Dewey, Dewey Brothers Company, Blanchester; W. F. Bollman, Baltimore

& Ohio Railroad, Chillicothe; Max. N. Freese, Baltimore & Ohio Railroad, Columbus; F. A. Snyder, Medina Farmers Exchange Company, Medina; Howard Townsend, N. Lewisburg; E. H. Beard, Beard & Enon; O. B. Armstrong, Osborn; L. B. Miller, Ansted & Burk Company, Springfield; C. A. Hiegl, Lepsic; Frank A. Tanner, Columbus; E. Teegardin, Duval; T. A. James, Jeffersonville; G. W. Blessing, Threlkeld & Blessing, Jeffersonville; C. T. Lloyd, Fulton Elevator Company, Fulton; T. E. Gordon, Fulton Elevator Company, Mt. Gilead; Kent Keilholtz, Southworth & Co., Toledo; J. E. Oglesbee, Emery Farmers Grain Company, Springfield; P. G. Wood, Riddle & Wood, Hilliards; W. H. Meyer, John Wickenhiser & Co., Toledo; C. Bower, McCord & Kelley, Columbus; J. R. North, North Brothers, Groveport; J. J. Curl, Marion Grain & Supply Company, Marion; J. B. Hill, Orient Grain Company, Orient; J. E. Stayman, Rockford; Geo. Wirth, Demolet Grain Company, Cincinnati; L. W. Douglas, J. Chas. McCullough Seed Company, Cincinnati; Phil Sayles, Smith Sayles Grain Company, Columbus; S. B. Swope, Huston & Swope Co., Canal Winchester; K. Threlkeld, The Pence Grain Company, Maplewood; W. H. Pickard, The Hub Grain Company, Bowling Green; J. M. Glick, Huston & Swope Company, Amanda; J. A. Streicker, J. F. Zahm & Co., Toledo; E. J. Wright, Greenville Milling Company, Greenville; J. M. Bell, Bauer Brothers Company, Columbus; C. Vlereborm, with C. E. Groce, Circleville; A. Grimes, with C. E. Groce, New Holland; C. O. Garver, J. W. McCord Mutual Insurance Agency, Columbus; J. H. Motz, Motz-Cook Grain Company, Brice; S. L. Rice, Metamora Elevator Company, Metamora; N. G. Bennett, McComb Farmers Elevator, McComb; F. Mayer, J. F. Zahm & Co., Toledo; H. Strader, Livingston Seed Company, Columbus; H. G. Dehring, Genoa; W. E. Hall, Scioto Grain & Supply Company, Ashville; J. C. Strong, Chicago, Ill.; H. I. Turner, Thurston Elevator Company, Thurston; D. E. Hobelman, AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.; D. E. Horn, E. A. Grubbs Grain Company, Greenville; O. Snyder, Columbus Grain & Hay Company, Columbus; "Woody" (Geo. D. Woodman), Grain Marketing Company, Toledo; W. F. Gardner, W. D. Rapp & Son, Sabina; G. C. Cline, The Ashville Grain Company, Ashville; J. H. Sark, The Ashville Grain Company, Ashville; E. T. Custerbender, E. T. Custerbender & Co., Sidney; A. W. Tullis, Xenia Farmers Exchange Company, Xenia; H. E. Warburton, B. & O. Railroad, Dayton; A. H. Cratty, Columbus; J. J. Pollard, Sprout, Waldron & Co., Toledo; E. R. Wooley, Pickerington Mill Company, Pickerington; C. C. Truax, Maizo Mills & Corona Mills, Columbus; C. L. Berryhill, The Fletcher Grain & Supply Company, Fletcher; J. W. McCord, Columbus, E. W. Manthey, Chicago, Ill.; E. O. Teegardin, Teegardin Grain Company, Duval; R. H. Teegardin, Teegardin Grain Company, Duval; A. E. Weaver, Ashville Grain Company, Ashville; F. E. Watkins, The Cleveland Grain & Milling Company, Cleveland; F. L. Watkins, The Cleveland Grain & Milling Company, Cincinnati; J. R. Johnson, Baltimore; B. S. Hempy, Baltimore; D. J. Schuh, Cincinnati Grain & Hay Exchange, Cincinnati; Wagner Bros., Mt. Gilead; Archie M. Peters, Ashville Grain Company, Ashville; Ludwig Oesterte, Ashville Grain Company, Ashville; W. F. Heffner, The Heffner Grain Company, Circleville; R. A. Sheets, R. S. McCague, Ltd., Pittsburgh; D. F. Stone, Croton Elevator Company, Croton; H. L. Wright, Croton; Fred Kile, Fred Kile & Son, Killeville; O. M. Clark, Cablé; W. S. Cook, McCord & Kelley, Columbus; J. G. Troester, Sidney Grain Company, Sidney; C. E. Groce, Circleville; A. M. Daugherty, Daugherty & Co., Derby; C. S. Huston, Gwinn Milling Company, Columbus; Jno. McDonald, The Fayette Grain Company, Washington C. H.; W. M. Myers, Myers Grain Company, Lockbourne; Lewis Wood, Myers Grain Company, Lockbourne; Jno. Noon, Noon & Sheehan, Plain City; Walter Narvin, Plain City; C. S. Bethards, The Sedalia Grain & Lumber Company, Sedalia; R. B. Price, The Sedalia Grain & Lumber Company, Sedalia; H. G. Pollock, Pollock Grain Company, Middlepoint; J. K. Pollock, Pollock Grain Company, Middlepoint; W. G. Stetchell, Amlin.

executive session. There was also an address by John W. Van der Vries, of the Chamber of Commerce of the United States, entitled "John Doe, American Business Man." The evening of the same day a banquet was the main feature, for which a large attendance turned out.

The principal topic of the second day was cost accounting. There was also a general discussion relating to the relation of brokers to corn millers and standards and misbranding. The officers for the new term were elected, including J. W. Craver, Aunt Jemima Mills Company, St. Joseph, Mo., president; T. R. Hillard, Miner-Hillard Milling Company, Wilkes-Barre, Pa., vice-president; T. B. Andrews, Davis & Andrews Company, Memphis, Tenn., vice-president; and T. M. Chivington, Chicago, secretary-treasurer. W. N. Adams, Arkadelphia Milling Company, Ark., was named chairman of the Executive Committee.



DAN M. JOHNSON, ESSEX JUNCTION, VT.
President Vermont Feed and Grain Dealers Association

TRANSPORTATION

OCEAN CHARTER RATES SHOW DOWNWARD TREND

The large volume of grain on hand at the Atlantic ports and in passage resulted in slack shipments. Due to unusually slow demand, rates on full cargo vessels have been somewhat weaker, in several instances showing a strong downward tendency. Leading freight brokers are inclined to feel that from all appearances the present conditions will last throughout the month.

HEARINGS ON EASTERN CLASS RATES CALLED

Railroads and shippers concerned in the Eastern class rate investigation before the Interstate Commerce Commission have been advised that their views for a revised class rate structure would be sought at a series of hearings beginning February 5, 1925. The Commission is planning to adopt a class rate structure either upward or downward. It will be given a traffic test in order to appraise its revenue effect. Interstate rates will be taken into consideration and evidence in regard to such rates will be freely admitted at the hearings, although they are not directly in issue.

CAR ORDER RULES UPHELD

Congress has the constitutional right to authorize the issuance by the Interstate Commerce Commission of preference orders for the use of railroad cars in times of emergency, according to a decision rendered by the Supreme Court last month. Justice Holmes rendered the decision in a case brought by Edward P. Avent, Jr., of Michigan, from the Federal district court at Cincinnati, Ohio. Congress did not exceed its authority, the court declared when in the Transportation Act of 1920 it authorized the Commission, whenever it is of the

THE NET CONTAINER LAW IN TEXAS

A good many of our readers who ship feed into Texas will be interested in a bulletin issued recently by H. B. Dorsey, secretary of the Texas Grain Dealers Association. In this circular, he said, in part:

You will remember in the spring we had up with Commissioner Chas. E. Baughman, of Austin, the question of the Net Container Law, portions of which were declared unconstitutional by the higher courts. I advised you that he stated to me in a letter that he had taken up with the attorney-general the matter of the status of the Net Container Law and would advise as soon as he heard. Not having heard from him, I wrote him recently reference to the status of the matter, as well as the Public Weighers Law, and I have letter from his Chief Clerk, W. W. Sanders, which reads: "Replying to your letter of the 15th instant, beg leave to advise that Mr. Baughman is out of the city at present, but I will say with reference to the Net Container Act, that it was held unconstitutional some time ago and since that time I have advised all parties inquiring that insofar as this net container law is concerned, they are not required to place the net contents of packages on the outside of the package."

"Under our weights and measures law, which still remains intact, parties selling commodities by weight or measure may be in violation of law when they sell in short weight packages or when they fail to give the required number of pounds, but this is a different proposition from writing or printing the net contents on the outside of the package."

"I believe the department submitted to the Attorney-General's Department some questions with regard to these matters some time ago, but we have received no reply. But meantime I have had to answer a large number of questions and knowing that the attorney-general could not hold otherwise I have uniformly advised that it is unnecessary insofar as the Net Container Law is concerned, to write or print the net contents on the outside of packages. This, of course, has no reference to the tax tag required by the A. & M. College in certain cases, nor to any regulations of the health department nor of the Federal Agricultural Bureau."

"You also ask about the public weighers act. The public weighers law has not been changed in several years. The law stands today as it was when the present administration went into office, except that the court of Civil Appeals at Amarillo in construing the right of private persons to weigh for the public, held that any person might weigh for the public by filing a bond with the commissioners' court of any county and that when such bond is filed it is the duty of the court to approve same and a writ of mandamus was issued compelling the commissioners' court to approve such bond. This enables private individuals in any part of the state to become a public weigher by filing bond. The public weighers laws of the state are more or less conflicting and unsatisfactory."

"Our Department prepared a bill which was presented in the last legislature, providing a uniform system for public weighers, but the legislature refused to remedy the matter, but left it in its crude and bunglesome form. If we receive any opinion from the Attorney-General's Department, we will give you the benefit of same, but meantime we are acting with the best light we have before us and advising those inquiring that all requirements of the Net Container Law are null and void."

OHIO GRAIN MANAGERS MEET

The Managers and Grain Dealers Association of the farmers' elevators of northwestern Ohio held their district meeting at Prairie Depot, Ohio, the early part of the current month. A program consisting of talks by members of the association, and music furnished by local talent was given, followed by a dinner.

INDIANA DEALERS PROGRAM

Announcement has been made by Secretary Charles B. Riley that the Indiana Grain Dealers Association will hold its annual meeting at the Board of Trade, in Indianapolis the week commencing January 12. The meeting will probably be held Thursday and Friday, and every effort will be made to secure a large attendance.

Regional meetings were held at various points in Indiana in November. One was held at Lahr House, Lafayette on November 24, one at Smith's office, Sheldon, Ill., on the same date, and one at J. C. Shafer's office, Hoopston, Ill., on the following day. The two last named meetings were joint meetings of Indiana and Illinois dealers.

CONVENTION CALENDAR

January 15-16—Annual convention of the Indiana Grain Dealers Association, Board of Trade, Indianapolis, Ind.

October 12-14—Annual convention of the Grain Dealers National Association, Hotel Muehlebach, Kansas City, Mo.

CORN MILLERS HOLD ANNUAL MEETING

The American Corn Millers Federation convened for the annual meeting at the Congress Hotel, Chicago, December 5 and 6. The first day was devoted to the officers' reports, registration, and an

opinion that shortage of equipment, congestion of traffic or other emergency exists in any section of the country, to suspend its rules as to car service and to make such reasonable rules with regard to it, as in the Commission's opinion will best promote the service in the public interest.

ORDER CORN RATES MODIFIED

The Commission has modified its order involving proposals of the Great Northern Railroad and other carriers covering intermediate routing via North Dakota junctions on transcontinental traffic. A supplemental order holds that the restrictions of the Great Northern Railroad of routing of corn in carloads from defined territory in South Dakota over its own lines from Aberdeen, S. D., to Montana, Idaho, Washington and Oregon destinations were not justified. Carload shipments of corn from defined territory in South Dakota to certain western destinations, principally in the State of Washington, were found by the Commission to have been overcharged, to the extent that charges collected exceeded those which would have accrued at the base rate of 59 cents. The complainants (most of whom were corporations buying and selling grain at Minneapolis) have been awarded reparation damages by the Commission.

LOWER EXPORT RATE FROM KANSAS CITY

In a letter to E. H. Thornton, traffic manager of the Galveston Chamber of Commerce, J. F. Holden, vice-president of the Kansas City Southern Railroad, conveys the information that definite action has been taken toward establishing a lower export rate on grain moving from Kansas City, Mo., to Gulf ports of Texas. He says that the new rate between Kansas City and Port Arthur will be promulgated soon. The same rate will be put into effect to all Texas ports, thereby competing with

New Orleans for large quantities of grain now in storage at Kansas City.

The proposed rate is approximately two cents per 100 pounds under the present rate, and will establish a competitive basis between rates on the all-rail route between Kansas City and Texas ports and that existing by rail-and-water route, using the Mississippi-Warrior barge line, from Missouri River crossings to New Orleans. Heretofore New Orleans has had an almost insuperable advantage in handling this business on account of the favorable rate offered by the government-owned barge line.

"There is no question but that this proposed reduction in the all-rail rate will divert to Texas ports considerable quantities of grain that have been moving by rail-and-water to New Orleans," Mr. Thornton said. "This movement has recently been heavy and we feel assured that Galveston and other Texas ports would have been able to handle a share of it if the proposed rates had been in force."

The present action follows the recent conference of Western trunk lines at Chicago.

GRAIN RATES IN SOUTHWEST PREJUDICIAL

The proportional rates on grain and grain products, in carloads from Kansas City to destinations in Louisiana and in the Mississippi Valley, southeastern and Carolina territories are unreasonable and unduly prejudicial to Kansas City, Council Bluffs, Des Moines, St. Louis and Cairo, as to the other destinations. This opinion was forwarded the Interstate Commerce Commission last month by Examiner Burton Fuller in a report on the complaint of the Board of Trade of Kansas City.

TRAFFIC NOTES

Proposed new rate schedules increasing the rates of grain and grain products for points in Idaho to Pacific northwest coast ports and related points were ordered suspended by the Interstate Commerce Commission from November 21 to March 1, 1925.

The question of amending a number of formal orders issued by the Commission in the Memphis southwestern investigation is to be reopened for further hearings, by the time and places have not yet been designated.

In commenting on the effective service rendered shippers by the regional advisory boards, *Railway Age* recently said: "No kind of amount of legislation or of regulation by any public body, could have solved the transportation problem presented to the shippers and railways this fall as it has been solved by the cordial co-operation of the two interests directly concerned."

The Commission has dismissed the case of Royal Milling Company vs. the Director-General, finding the rate on wheat from points in western Nebraska to Great Falls, Mont., between October 29 and November 22, 1919, imposed on 36 cars, was not unreasonable.

The Santa Fe line has petitioned the Commission to reopen the hearing in which the Commission denied them authority to disregard the long and short haul provisions of the Interstate Commerce Act in respect to certain grain commodities moving in Kansas, Missouri and Texas.

A complaint has been recorded by the Oklahoma Commission against an adjustment alleged to have resulted from the rates prescribed by Texas. They allege unreasonable rates on grain and grain products, hay, straw and articles taking the same rates basing thereon, from all points in Oklahoma to all points in Texas, and illegal discrimination against Oklahoma farmers, producers and dealers, in favor of Texas.

RECEIPTS AND SHIPMENTS

Following are the receipts and shipments of grain, etc., at the leading terminal markets in the United States for November:

BALTIMORE—Reported by Jas. B. Hessong, secretary of the Chamber of Commerce:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	1,412,383	2,771,891	851,774
Corn, bus....	36,608	42,355	
Oats, bus....	197,585	206,579	28,088
Barley, bus..	997,123	22,818	751,382
Rye, bus....	606,778	45,360	487,935
Buckwheat, bus..			43,335
Malt, bus....	16,414	20,801	58,462
Straw, tons..	99	41	
Milled feed, tons	934	1,147	
Hay, tons....	1,286	2,188	
Flour, bbls..	194,124	195,160	123,552

CINCINNATI—Reported by D. J. Schuh, executive secretary of the Cincinnati Grain & Hay Exchange:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	407,400	364,800	337,000
Corn, bus....	433,000	579,600	295,400
Oats, bus....	252,000	242,000	188,000
Barley, bus..	4,200	6,500	
Rye, bus....	19,600	14,400	15,400
Hay, tons....	7,436	7,700	
Feed, tons..	2,670	2,490	

CAIRO—Reported by M. C. Culp, Chief Grain Inspector and Weighmaster of the Board of Trade:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	79,412	83,554	1,000
Corn, bus....	9,055	59,200	31,055
Oats, bus....	805,477	1,173,555	908,279

CHICAGO—Reported by J. J. Fones, secretary of the Board of Trade:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	3,363,000	1,591,000	2,963,000
Corn, bus....	6,347,000	8,000,000	2,508,000
Oats, bus....	4,714,000	5,097,000	3,739,000
Barley, bus..	1,127,000	767,000	383,000
Rye, bus....	2,386,000	925,000	14,000
Timothy Seed, lbs.	3,736,000	1,606,000	1,352,000
Clover Seed, lbs.	2,195,000	1,176,000	941,000
Other Grass Seed, lbs.	2,328,000	3,269,000	2,560,000
Flax Seed, bus.	283,000	168,000	
Hay, tons....	14,419	11,092	824
Flour, bbls..	1,038,000	879,000	637,000

DENVER—Reported by C. B. Rader, secretary of the Grain Exchange.

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	447,000	361,500	27,000
Corn, bus....	478,950	438,650	117,800
Oats, bus....	104,000	160,000	70,000
Barley, bus..	129,200	144,500	37,400
Rye, bus....	7,500	12,000	1,500
Hay, tons....	1,490	1,090	

DETROIT—Reported by C. B. Drouillard, secretary of the Board of Trade:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	197,000	3,000	
Corn, bus....	18,000	3,000	
Oats, bus....	204,000	52,000	
Barley, bus..	44,000		
Rye, bus....	63,000		

DULUTH—Reported by Chas. F. MacDonald, secretary of the Board of Trade:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	27,608,667	6,053,780	26,715,881
Corn, bus....	3,127	464,894	175,000
Oats, bus....	994,294	627,096	1,580,720
Barley, bus..	1,986,549	364,605	2,141,618
Rye, bus....	5,104,895	1,414,931	4,540,744
Flax Seed, bus.	6,262,368	1,517,872	6,620,364
Flour, bbls..	756,230	907,575	904,385

FORT WILLIAM, ONT.—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	42,659,761	72,482,231	35,722,149
Corn, bus....		4,161	2,589
Oats, bus....	7,601,283	10,348,809	5,824,162
Barley, bus..	6,998,045	2,309,696	6,629,106
Rye, bus....	804,886	872,772	738,793
Flax Seed, bus.	2,276,851	1,403,466	1,868,367
Mixed Grain, lbs.	9,504,640	10,628,600	5,172,294

INDIANAPOLIS—Reported by Wm. H. Howard, secretary of the Board of Trade:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	423,000	247,000	81,000
Corn, bus....	2,113,000	2,494,000	1,464,000
Oats, bus....	606,000	592,000	662,000
Rye, bus....	17,000	17,000	18,400
Wheat, bus..	5,211,000	5,713,200	4,824,900
Corn, bus....	1,738,750	1,758,750	426,250
Oats, bus....	567,800	1,026,800	288,000
Barley, bus..	34,500	228,000	18,200
Rye, bus....	47,300	29,700	51,700
Bran, tons..	8,460	4,680	20,020
Kaffir Corn, bus.	646,800	194,700	224,000
Hay, tons....	24,935	26,832	12,072
Flour, bbls..	70,200	57,200	507,325

KANSAS CITY—Reported by W. R. Scott, secretary of the Board of Trade:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	5,211,000	5,713,200	4,824,900
Corn, bus....	1,738,750	1,758,750	426,250
Oats, bus....	567,800	1,026,800	288,000
Barley, bus..	34,500	228,000	18,200
Rye, bus....	47,300	29,700	51,700
Bran, tons..	8,460	4,680	20,020
Kaffir Corn, bus.	646,800	194,700	224,000
Hay, tons....	24,935	26,832	12,072
Flour, bbls..	70,200	57,200	507,325

LOS ANGELES—Reported by the secretary of the Grain Exchange:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, car-load	192	237	
Corn, carloads	156	106	
Oats, carloads	57	61	
Barley, carloads	112	102	
Rye, carloads		1	
Kaffir Corn, carloads	77	2	
Flour, car-load	202	253	

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	1,164,225	190,400	827,439
Corn, bus....	201,175	1,555,480	205,028
Oats, bus....	1,306,050	2,048,200	1,071,512
Barley, bus..	1,136,540	703,100	460,118
Rye, bus....	343,380	110,370	143,980
Timothy Seed, lbs.	512,860	480,000	226,090
Clover Seed, lbs.	1,249,555	386,991	266,630
Flax Seed, bus.	83,370	74,410	
Feed, tons..	1,603	9,250	7,215
Hay, tons....	316	2,821	168
Flour, bbls..	200,720	288,300	637,420

MINNEAPOLIS—Reported by G. W. Maschke, statistician of the Chamber of Commerce:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	12,013,650	14,632,060	5,829,660
Corn, bus....	385,880	2,358,500	295,280
Oats, bus....	4,908,690	2,513,330	4,146,420
Barley, bus..	2,756,500	1,632,690	1,926,940
Rye, bus....	714,570	791,160	735,870
Flax Seed, bus.	2,781,020	1,307,860	478,190
Hay, tons....	2,413	2,776	120
Flour, bbls..	63,021	140,466	1,006,111

MONTREAL—Reported by J. Stanley Cook, secretary of the Board of Trade:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	16,249,960	17,860,476	21,563,387
Corn, bus....	23,878	91,928	738
Oats, bus....	3,269,401	2,110,034	930,989
Barley, bus..	601,752	830,489	1,282,635
Rye, bus....	1,715,193	26,250	3,666,079
Flax Seed, bus.	222,786	84,188	
Hay, tons....	80,246	76,323	40,081
Flour, bbls..	415,811	689,661	511,871

NEW ORLEANS—Reported by S. P. Fears, Chief Grain Inspector & Weighmaster of the Board of Trade, Ltd.

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	2,297	5,382,663	503,304
Corn, bus....	94	202,571	82,824
Oats, bus....	122	102,490	20,690
Barley, bus..	5		
Rye, bus....	14		22,342
Kaffir Corn, bus.	6		

NEW YORK CITY—Reported by H. Heinzer, statistician of the Produce Exchange.

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	10,204,600	12,269,200	6,016,000
Corn, bus....	129,000	52,000	25,000
Oats, bus....	1,447,000	1,267,000	931,000
Barley, bus..	4,925,000	797,900	3,025,000
Rye, bus....	2,626,500	931,500	775,000
Timothy Seed, bags			80
Clover Seed, bags	6,484	4,492	14,012
Flax Seed, bus.	1,586,500	505,300	
Hay, tons....	8,881	9,556	3,545
Flour, bbls..	995,614	1,211,361	655,000

OMAHA—Reported by F. P. Manchester, secretary of the Grain Exchange.

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	2,328,200	1,934,800	3,064,600
Corn, bus....	529,200	3,448,800	397,800
Oats, bus....	1,022,000	1,892,000	1,030,000
Barley, bus..	80,800	163,200	91,200
Rye, bus....	168,600	121,800	155,400

PEORIA—Reported by John R. Lofgren, secretary of the Board of Trade:

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	136,350	150,850	104,050
Corn, bus....	1,367,450	1,643,697	731,600
Oats, bus....	872,250	1,174,950	709,400
Barley, bus..	102,200	400,600	42,000
Rye, bus....	40,150	2,400	38,400
Mill Feed, tons	39,540	36,310	39,387
Hay, tons....	2,710	2,430	70
Flour, bbls..	181,800	165,700	163,600

PORTLAND, MAINE—Reported by Howard H. Waldron, Traffic Manager of the Chamber of Commerce.

Receipts		Shipments	
1924	1923	1924	1923
Wheat, bus..	230,192	1,641,113	436,881
Oats, bus....		101,561	390,919
Barley, bus..	121,306	74,868	64,823
Rye, bus....	209,694		

ST. LOUIS—Reported by Eugene Smith, secretary of the Merchants' Exchange.

Receipts

DAILY DATA ON GRAIN FUTURES

A statistical review of the activities of the Chicago grain market as regards transactions in futures, day by day, from January 1, 1921, to May 31, 1924, has been prepared by the United States Department of Agriculture and is now available for distribution as Statistical Bulletin 6, entitled Grain Futures: Daily Data.

The information is based on a study by the Department of the workings of the grain markets of the country. Although all the markets were studied, most of the data collected concerned the Chicago market because of its leading position.

Figures with relation to the volume of trading on the Chicago Board of Trade have been compiled on a daily basis, as well as on a monthly and yearly basis. The daily figures are for all the grains in which trading now takes place on the board. They are properly comparable, it is said, with the figures that, ever since January 1, 1924, have been released for publication at noon every day at Chicago by the grain-exchange supervisor there relating to the volume of the previous day's trading.

Copies of the bulletin may be had free upon request, as long as the supply lasts, from the Department of Agriculture, Washington, D. C.

WHEAT TYPES PERSIST

An old British miller, W. T. Bates, says that one of the popular English wheat varieties, "Rivets," is at least 150 years old. He cites another variety, "Square Head," which he claims from actual knowledge, is unchanged after 60 years. It is his belief, and he argues it with skill, that outside the new varieties introduced, which often quickly pass out of cultivation, the standard varieties do not change. He thinks Egyptian wheat is the same today as in the time of the Pharaohs.

He may be right. It is claimed that the wheat raised in Sicily today is identical with that which grew in Sicily when ships carried the island's produce to Rome 2,000 years ago. But curiously, Mr. Bates notes a vast change in America's wheats in the past 40 or 50 years. He says that none of the Northern wheats are equal to the "Duluth" grade which occupied first place 40 years ago. Another grade, not variety, "Chicago Spring," was popular and he believes that "St. Louis Winter" and "Californian" have not been equaled by the wheats that have succeeded them in the export trade. This he attributes to possible degeneration, due to over-cropping. He thinks the wheat itself would, under proper conditions, recover its strength. The persistence of Fife wheat would indicate this.

OUTLOOK REPORTS

The issuance of agricultural outlook reports that enable farmers to adjust their production more closely to the market demand for farm products has been the outstanding accomplishment of the United States Bureau of Agricultural Economics during the past year and has helped farmers to reduce losses and to plan for better returns, according to Dr. H. C. Taylor, Chief of the Bureau.

Twice a year surveys are made of intentions of farmers to plan various crops, and on hog breeding operations designed to give producers an accurate index of prospective marketings. The results of these surveys together with the facts of foreign production, domestic and foreign demand, form the basis for the outlook reports.

Close study is being given by the Bureau to world-wide agricultural conditions in connection with domestic problems in anticipating probable trends of production and market prices, and new research work has been arranged to supply the basic facts and develop methods of forecasting trends wherever possible. All this is intended to give farmers fore-hand knowledge with which to prevent, so far as possible, the occurrence of agricultural depressions.

"This Bureau is giving intensive study to the

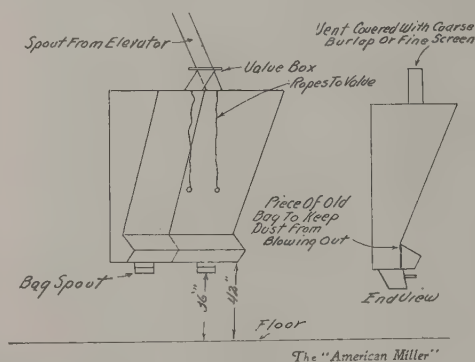
problems involved in securing for agriculture its proportionate reward," Doctor Taylor reports. "It endeavors to show the relation of more efficient farming and marketing to the problem of securing a fair share of the national income, as a basis of an adequate standard of living on farms and in rural communities. The publication of the facts as disclosed by careful statistical studies covering many localities, and at the same time making recommendations for changes wherever it appears that a change will be beneficial, is helping farmers to inaugurate programs of production which will yield them a better return for their labor and capital."

DEVICE FOR SACKING FEEDS

By G. E. WOOLF

Very frequently the grain elevator operator finds it difficult to run his feed mill constantly and still take care of the hundred other little things which demand attention during rush periods. I found this trouble, and rigged up for myself a feed sacking device which enables me to run my feed grinder constantly and still have a few minutes at a time to turn my hand to other things when the rush is on.

You will note by the drawing that there are two bins each holding five or six bags of feed. You can, of course, make these larger. The valve permits the operator to change the course of the feed from the elevator from one bin to the other. The bag spout arrangement practically eliminates all dust



blowing out around the bag and all but very fine dust settles in the bin. If you desire, the vent can be spouted out through the side of the building and so you can get rid of practically all of the dust.

PROTEIN IN DARK HARD WINTER WHEAT

It is accepted as an axiom almost, that dark Hard Winter wheat has more protein than ordinary Hard Winter wheat. In a recent paper W. F. Frank has shown that this is true within certain limits, but that qualification of the statement is required in the light of investigations conducted to learn the relationship between protein content and texture, kernel weight, test weight, etc.

It appears that within a given sample the dark, hard and more vitreous kernels contain relatively more protein than those kernels not so dark, hard and vitreous. Nevertheless, it was found that the yellow kernels in one sample may contain more protein than the darkest, hardest and most vitreous kernels in another sample. So it is something of a question of locality.

From the tests made there did not seem to be any marked relation between kernel weight and protein content of yellow portions of samples analyzed, but there did seem to be a direct and progressive relation between average kernel weight and protein content in the case of the dark hard portions of the kernels. This conflicts with the prevalent opinion that an increase in kernel weight is accompanied with a decrease in protein.

As a result of his investigations Mr. Frank says that there is no constant relation between the dark hard and vitreous kernels and protein content, and that in the absence of protein determinations it would be better to mass all Hard Winter wheat

from a protein standpoint, than to bin it according to the percentage of dark, hard and vitreous wheat. While it is possible for the miller to obtain a slightly higher average protein content by selecting those cars carrying a relatively high percentage of the dark, hard and vitreous kernels, it is more economical to run protein on all cars and select high protein cars. The disadvantage of using only cars of dark hard is the premium paid, added to which is the uncertainty of getting a high protein content.

POLISH AGRICULTURE

The present Polish Republic comprises the territory of the old Russian province of Congress Poland, Galicia, the former Prussian Poland, Upper Silesia and a portion of the Vilna territory having 146,821 square miles of territory and a total population of about 27,000,000. That portion of Vilna which is now a part of Poland was in dispute with Lithuania until in 1922. The territory submitted to the plebiscite was composed of Silesia and the smaller territories of Mozuri and Kwidzyn having a total population of about 3,000,000 people.

The changes in boundaries have made it difficult to get agricultural statistics comparable over a series of years. An attempt has been made to determine the area and production of the cereal crops, potatoes and sugar beets for the pre-war territory now included in the Polish Republic. The data are preliminary estimates, however, and are subject to changes. The total acreage sown to these crops in 1923 was within nearly 3,000,000 acres of the pre-war acreage in the same territory. Wheat, rye and barley are still somewhat below pre-war acreage but the acreage of potatoes and oats is close to pre-war figures.

The acreage sown to fall cereals this season is reported to be less than last year by about 100,000 acres. All the decrease, however, is in barley acreage. Wheat, rye and oats show small increases. Livestock are not far below pre-war numbers in the case of horses, cattle and hogs, though sheep are still somewhat below.

Although Poland is now producing foodstuffs in excess of the domestic needs export restrictions are still in force varying in accordance with the different commodities. Reports indicate that agricultural prices are depressed, perhaps artificially, but that territory which is now Poland seems to be approaching its pre-war position in agriculture.

If Poland is able to offset the influences adversely affecting the currency, and the labor situation does not prove too difficult, agriculture may prosper. Just how much improvement may be effected during the next year depends in a large measure, upon the financial and political conditions within the Republic.

THE AGRARIAN POLICY OF POLAND

On July 15, 1919, the Polish Diet approved unanimously the agrarian law the chief author of which was Mr. Vitos, leader of the peasant representation and today president of the council. According to this law a single owner can own only 148 acres in industrial or suburban zones, 445 acres elsewhere, except in certain regions of Posen and in some of the eastern parts of the Republic where the maximum amount is 988 acres.

The large estates of over 247 acres occupy at the present time 44% per cent of the total farm area in Poland and 35,150,756 acres out of a total 78,931,622 acres used for agricultural purposes of all kinds. The forests are in the hands of the large land holders, but it is also the large land holders who furnish the largest production of rye and wheat for the consumption of the inhabitants of cities and for export; the largest quantities of sugar, alcohol, starch, etc. On large estates in Poland there may be found sugar factories, distilleries, starch factories, potato drying houses and places for the production of selected seed.

The small estates and farms, on the contrary furnish, above all, the animal products, although it is on the large estates that the better breeds of stock are found.

HAY, STRAW AND FEED

RED CLOVER SUBSTITUTE

A committee at Cornell University, Ithaca, N. Y., asked to investigate the apparent shortage of Red Clover and to recommend a seeding mixture which would conserve the supply of Red Clover, has reported as follows:

"Where the soil conditions are suitable, the more extensive seeding of Alfalfa should be encouraged.

"Where the mixture of Timothy and Red Clover is normally seeded it would be well to substitute Alsike for the part of the Red Clover.

"Where a mixture of Timothy, Red and Alsike in the relative proportion of 10-6-4 pounds to the acre has been used, the following mixture may be used this year: 10 pounds of Timothy, 3 pounds of Red Clover, and 5 pounds of Alsike Clover."

MARKET FOR FEEDSTUFFS IN EUROPE

The demand for feedstuffs in northern Europe is steadily increasing. The remarkable development of the dairy industry and pork production in Denmark is largely built upon the importation of concentrates. In other countries of northern Europe, there seems to be a tendency to increase the numbers of livestock, and in such a densely populated area, this means that more feedstuffs must be imported. The domestic production of feedstuffs in this area consists chiefly of oats, barley, root crops, and hay. Reports indicate that in 1924 the yield of oats was good, that of barley poor, of fodder roots good, and of hay good but of poor quality. The imports to supplement the domestic production are usually of corn, oats, barley, and oil cake. This year corn is scarce and high in price, oats will not be needed in great quantity, barley for feed will not be required so much as higher grade barley for malting.

DR. STROWD LEAVES WISCONSIN

On January 1, Dr. W. H. Strowd, formerly director and chief chemist of the Division of Feed and Fertilizer Inspection, Wisconsin Department of Agriculture, leaves the Wisconsin department to take up his new duties as secretary of the Soft Wheat Millers Association and this will necessitate making his new headquarters at Nashville, Tenn. In this position he succeeds J. B. McLeMore, who resigned to go with the George Carter Milling interests of Johnson City, Bristol, Tenn., and Bristol, Va.

Dr. Strowd has gained a reputation for ability and fairness among both feed control officials and the feed interests with whom he came in contact in his position with the Wisconsin Department of Agriculture. He was chairman of the Executive Committee of the Association of Feed Control Officials of the United States and at the recent annual election, he was elected to the office of vice-president of the Association.

HAY LIFELESS IN NEW YORK

By C. K. TRAFTON

General conditions in the local hay market have been decidedly similar to those mentioned in my last review. Many members of the trade who said then that they could not recall a time when there was so much stagnation, have been frank enough to admit that the sluggishness and narrowness was even worse in the past month. As one leading receiver and distributor claimed "you could not, on some occasions give low grades away at any price." Of course, this was not true constantly as there were occasions when inferior grades or poor trash could be disposed of, but as a rule this could only be accomplished by accepting lower prices, and as a consequence scarcely enough was realized on numerous occasions to exceed freight and other charges.

It is especially noteworthy at this juncture that the conspicuous depression in the low grades was largely due to the fact that the bulk of the hay on offer arrived by river-boats. The unusual rush on this occasion was patently in anticipation of the closing of river navigation as usual in December. It has almost invariably been the case to expect the arrival of an abundance of common or low grades at this stage, as many farmers and country shippers are naturally in a mood to "clean up" as much as possible previous to the closing of water navigation.

In the meantime receipts by rail have continued decidedly light, and consequently the supply of good merchantable or choice grades—No. 2 or No. 1 Timothy, also Light Clover Mixed—has been moderate, but even this has not served to prevent a downward trend as even the superior qualities

have been available at comparatively low cost. It was again plainly evident that this weaker trend was due to the indifference manifested by the buying element.

Because of the facts described, it has frequently been exceedingly difficult to form a positive opinion as to values, but particularly of course re poor grades for which the outlet has been so greatly circumscribed.

On the surface there seemed to be only one interesting or redeeming feature, which was the clearance late in November of 2,047 small bales to Belfast, Ireland, which is the first noteworthy shipment of this nature in many months.

There are numerous conservative and well informed members of the trade who contend that there is a firm undertone for they feel that prices have declined about enough and they assume that there may be greater firmness after the turn of the year when the demand generally improves as it almost invariably does after the annual stock taking. This opinion is partly based on the theory that hay prices look low as compared with corn, millfeed and other feeding-stuffs.

KANSAS CITY MILLFEEDS ACTIVE

By R. S. BROWN

Millfeeds have shown a marked activity and rise in the Kansas City market during the past few weeks. There have been several factors involved, among the chief ones being the curtailed operations of flour mills and the increased feeding demand, with the oncoming of winter. Corn is much higher than a year ago—and considerably above the values of bran and feeds, it is said. The lack of production with which to meet mixed car orders is causing a heavy call from millers for millfeeds. Some of the larger flour mills in Kansas have been forced to make purchases of gray shorts for their mixed cars, and it is said, they may need more. Bran has shown a recent strong advance, and the first week in December was selling at \$28 a ton; while gray shorts were selling at \$33 and \$34. Bran is around the same level as a year ago—and corn is very much higher, indicating that bran has a ways to go yet before it will be affected by the corn competition on price basis.

FEED MARKETING SPECIALIST RESIGNS

On December 1, Paul Mehl severed his connections with the Connecticut Agricultural College, with which he was associated as Marketing Specialist at Storrs, and is now associated with the Chicago office of the Grain Futures Administration of the United States Department of Agriculture. During Mr. Mehl's association with the eastern college, he has been particularly effective in his efforts to improve methods of retail distribution of grain and feed.

He originated the idea of holding annual conferences of Connecticut feed dealers at Storrs, arranged excellent programs for these and stood ready at all times to serve in any capacity to help the dealer in his business.

Feed dealers not only of Connecticut but of the entire country are sorry to see him go from Storrs, and so get out of that close touch which he had formerly had with them, but they wish him success in his new undertaking.

THE HORSE HOLDS HIS OWN

President Frank L. Carey of the Chicago Board of Trade, in an address at the annual meeting and banquet of the Horse Association of America at Chicago on December 3 said the horse is far from being thrown into the discard. He also sounded an optimistic note for the future of business generally during the next few years.

"There has been much discussion in recent years as to the possible fate of the horse," Mr. Carey said. "No doubt much of this has been due to conflict between manufacturers of farm implements and breeders of horses. This feeling, or conflict, is unwise and certainly unnecessary. Progress will not be halted regardless of obstacles. Therefore, if the horse stands in the path of progress it is doomed and will be replaced. But there has never been the slightest evidence that such is the case. On the contrary the horse, which has been a bulwark of civilization, will continue serving mankind. The power-driven machine has its definite purpose to serve. And so it is with the horse. Both are needed."

"Feed men in the Middle West and in the East claim that the horse, instead of passing into the

discard, is being used far more than ever before. Harness and wagon men are of the same opinion. It is not hard to believe these claims. For it has been estimated by members of our own exchange that nearly 40,000,000 tons of hay are consumed in a year by horses and mules in this country. It is estimated that a billion bushels of oats are consumed by these animals. That certainly would not indicate the passing of Old Dobbin.

"There seems to be little doubt that the expense of the horse is below that of the power-driven vehicle in most instances. Some authorities declare that the investment in a five-ton truck is equal to five teams. If that is a fact, it will be many long years before the horse passes into obscurity. There is at least much food for thought in the statement.

"In some states, particularly in the Southwest, business men have used horses for short hauls with a view to helping farmers who raise feedstuffs. Incidentally, these business men have profited. But it was a splendid move nevertheless. The feed trade might well spread that idea in other districts. Farmers would then be encouraged to produce more and better horses.

"The Chicago Board of Trade, whose 1,600 members include many feed merchants, has more than a passing interest in the horse. Indeed every member of the exchange has a direct interest. The horse is a definite factor in the whole grain industry. And as an officer of the Board of Trade I wish to assure this organization of our continued co-operation in the excellent work that is being done."

FEDERAL HAY INSPECTORS

Several cases have been cited recently where hay was represented as having been graded by Federal hay inspectors when this was not true. Investigation indicates that it was not intentional misrepresentation, but due to misunderstanding of the Federal Hay Inspection Service by the buyers.

The men who made the inspections in most cases were licensed to grade grain under the United States Grain Standards Act, and buyers assumed that these men were also Federal hay inspectors.

All Federal certificates have the words "United States Department of Agriculture" printed at the top in large type. A list of Federal hay inspectors under date of October 1, 1924, is given herewith:

ALABAMA

Birmingham—M. J. Kendrick, 211 Chamber of Commerce.

DISTRICT OF COLUMBIA

Washington—Bureau of Agricultural Economics, 339 Pennsylvania Ave., N. W.

ILLINOIS

Chicago—H. H. Whiteside, Division Supervising Inspector; R. E. Webster, Inspector, Room 507, 139 N. Clark St.

MAINE

Augusta—Fred C. Sturtevant, Maine Department of Agriculture, Division of Markets.

MARYLAND

College Park—Geary Eppley, Maryland Department of Markets, University of Maryland.

MASSACHUSETTS

Boston—P. R. Dunn, City Hall Annex.

MISSOURI

Kansas City Bureau of Agricultural Economics, 1513 Genesee St.

NEW JERSEY

Trenton—Guy E. Mayo, New Jersey Department of Agriculture, Division of Markets.

NEW YORK

Auburn—S. N. Swartwout, 78 East Genesee St.
New York City—R. J. O'Brien, 601 West 33d St.

NORTH CAROLINA

Raleigh—R. B. Etheridge, North Carolina Department of Agriculture, Division of Markets.

OHIO

Cleveland—R. M. Batson, 615 Stone's Levee.

PENNSYLVANIA

Philadelphia—Charles Molin, 587 Bourse Building.

VIRGINIA

Norfolk—C. M. Shiley, Port Traffic Building, 406 East Plume Street.

Richmond—W. F. Green, Thirteenth and Cary Sts.; Nelson A. Loucks, Virginia Department of Agriculture, Division of Markets, 1030 State Office Building.

WISCONSIN

Madison—Wisconsin Department of Markets, B. B. Jones, in charge of inspection. Inspectors, A. J. Opstedal, A. E. Peterson, S. H. Williams, and O. A. Zillmer, are stationed at Madison, Green Bay, Spooner, and other points in the state. These inspectors usually are available for making inspections at any point in Wisconsin. Applications for service should be made to the Madison office or to the inspectors personally.

A NEW FEED MILL

in the

SOUTH-WEST



THE alliance already established between the preparation and marketing of mixed feeds and the grain elevator has been gradually becoming a closer one, and feeds have been firmly identified as an important adjunct in the business of many grain merchants. As the general use of prepared feeds increases—as it inevitably must—the field is necessarily going to be correspondingly wider, and the opportunities greater. The importance of sidelines and other factors to add to the mere handling of grain in elevators has been stressed considerably in the last few years, and there is very likely no single factor as popularly used by elevators as feed. A number of mills have been operated in conjunction with elevators at a very gratifying profit.

Among the larger mills which have made recent improvements is the Hardeman-King Company, located in Oklahoma City, Okla. The new feed mill, grain elevator, warehouse, office and garage are located on the tracks of the Chicago, Rock Island & Pacific, and in laying out the plans, ample provision has been made for further expansion in the future.

The mill building is 48 feet square, and has two stories and a basement, constructed entirely of reinforced concrete, with the exception of the curtain walls, which are of hollow face tile. There is, of course, a complete line of machinery for grinding, blending, mixing, polishing and sacking poultry and stock feeds.

The warehouse is of the same type of construction, measuring 48 by 160 feet, one story and basement. The office is also of this type of construction and is situated at one end of the warehouse on the second floor. The headhouse is 36 feet square and about 120 feet in height. The engineering and construction have been carried on by the Jones-Hettelsater Construction Company, of Kansas City, Mo., and they assert that the completed plant constitutes one of the most up-to-date mills of its kind in the Southwest.

In the basement are two separate blending units, consisting of percentage feeders which accurately measure and feed the various ingredients into mixing conveyors, where they are thoroughly mixed and then elevated to the second floor. This equipment includes 12 Draver Feeders for scratch grains and 13 Draver Feeders for soft feeds. There is also a salt feeder, a molasses feeder, and three molasses storage tanks, 15 feet square by 10 feet in height. The tanks are provided with a Viking Pump to force the molasses up to the heating tank.

The heating plant is also located in this part of the building, and there is a boiler room 16 feet square. Shower baths, lavatories and locker rooms also occupy a part of this space.

On the first floor there are two Monarch 9 by 36 collar oiling Double Roller Mills and two others of the same make 9 by 30. These are used for crimping oats, making corn chop and cracked corn and meal. There is also a 24-inch Monarch Direct Connected Motor Driven Attrition Mill for grinding feeds; a magnetic separator which provides protection against tramp iron getting into the attri-



PART OF THE FIRST FLOOR EQUIPMENT

tion mill, a Monarch Feed Packer and a Richardson Automatic Feed Sacking Scale.

On the second floor is located a No. 4 Monarch Corn Scourer; four Monarch Round Reels, iron-lined; and a No. 5 Cracked Corn Separator made by the same manufacturer. There is one single and one double disc aspirator, and eight 36-inch Monarch Metal Dust Collectors have also been installed. Other machinery includes two 100-gallon molasses heating tanks and a 16 by 30-inch Monarch Molasses Mixing Conveyor, as well as a bag elevator running from the basement to the top floor. Three motors—one of 50 horsepower, one of 40 horsepower and one of 30 horsepower—are used for driving the mill equipment.

The grain elevator is designed to serve as a headhouse for additional storage bins that may be

constructed on the north or west sides. It has 21 bins with a combined storage capacity of 60,000 bushels. On the north side of the headhouse is the combination wagon dump and a truck dump scale. A track scale is on the south side of the building. The two main elevators are steel and have a capacity of 5,000 bushels per hour each.

On the first floor of this unit is a Monitor Receiving Separator and Oat Clipper. On the track side is a No. 12 car puller with a capacity of eight cars. Each load is received and carried to the corn sheller in the basement of the headhouse by a chain drag. Here it is shelled and elevated to the cob cleaner in the cupola. All elevators and spouting in both elevators and mill are of sheet metal construction. Richardson Portable Sacking Scales are used and a Champion Motor Driven Cornmeal Weighing Scale.

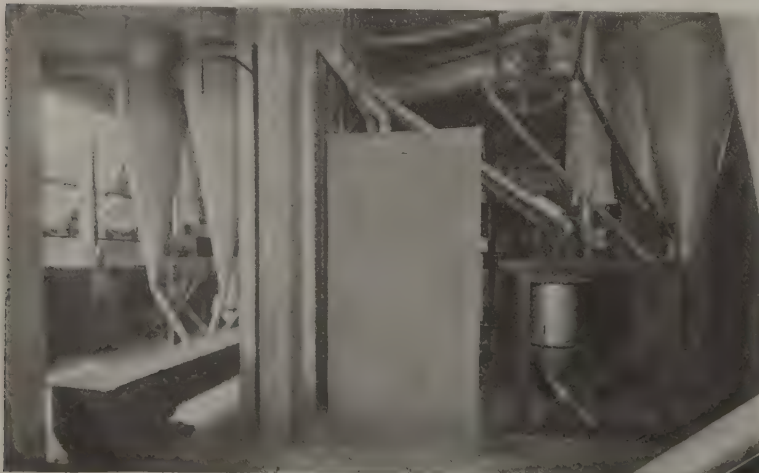
The warehouse is 162 feet long and 48 feet wide, and a portion of it is walled off to provide a garage. As has been said, directly over this garage on the second floor is located the office of the plant.

The complete plant was designed and equipped by Sprout, Waldron & Co., of Muncy, Pa.

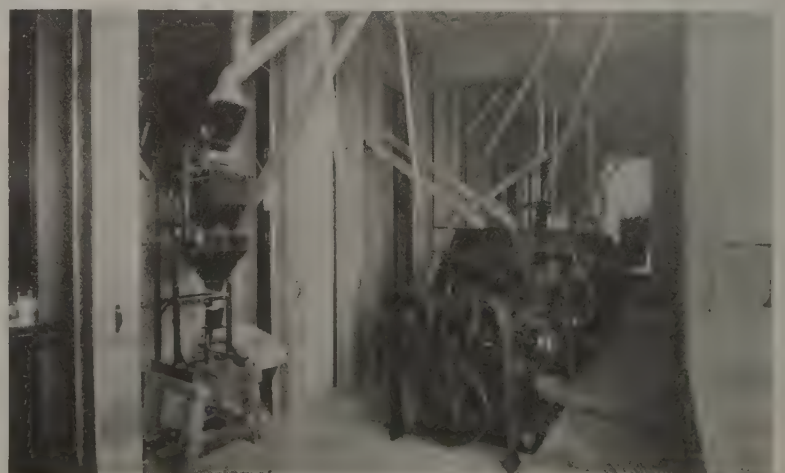
Two Morse Silent Chain Drives are used in the main elevators in order to bring power efficiency to as high a level as possible. Driving and driven shafts operate at all loads at the designed proportionate speeds, the chain drive permitting positive connection at any reasonable distance between the shafts from approximately the same measurements required by engaging gears to eight or 10 feet on big drives. Sustained efficiency is accomplished through the design of the links, keeping the chain always in proper pitch contact with the sprockets, and maintaining a distribution of the load over a large number of teeth.

The history of the Hardeman-King Company to date does not cover a very great period, as the growth of the enterprise has been unusually rapid. The company was organized in Oklahoma City in 1912, with T. B. Hardeman as president. S. T. King (now deceased) was the original vice-president and Cecil T. Hardeman was secretary-treasurer. They erected a small feed plant; and in 1917 a larger unit was built at McAlester, which was under the direction of Cecil T. Hardeman.

This plant at McAlester proved very successful and quite a large portion of the company's business in the last seven years has been done from that plant. In 1920, when Mr. King died, the present officers took charge of the company. T. B. Harde-



VIEW OF THE SECOND FLOOR



ROLL FLOOR WITH SACKING SCALE

man remains president, and C. T. Hardeman is vice-president and manager, and R. B. Hardeman is secretary-treasurer.

The business has steadily grown, and in the latter part of 1923 construction of the new Oklahoma City plant was commenced. C. T. Hardeman is manager of this plant, and R. Bruce Hardeman is in charge of the McAlester plant. With business still increasing, it has become fully apparent that the added capacity was very necessary, and under the able direction of the personnel which was responsible for the company's success so far, there is no doubt that the enterprise will continue to prosper.

NORTHWEST HAY RULES

Recommendations were passed at the public hearings on hay grades and trade rules in Ellensburg, Wash., on November 14 and Seattle, Wash., on the 15th that all trading be done on contract basis of state grades with country point inspection where possible, and that under executory contract specifying state grades, provided no special provision is contained therein covering same, the following rules shall apply:

1—That no car containing less than 100 per cent of hay as shown by loading point certificate, specified by contract shall be applied thereon without the customer's consent.

2—Where, upon arrival of car at destination, re-inspection is called for by customer upon hay bought on contract specifying state grades and upon re-inspection the car is found to grade more than 25 per cent off the contract grade, the customer shall have the right to reject the car and refuse its application on contract. If, however, the re-inspection shows that 75 per cent or more of the hay in the car is within the contract grade, the car shall be applied upon contract and settlement made upon the basis of 10 per cent off terminal price for such part of the hay as is one grade below contract grade and 20 per cent off terminal price, for that part being two grades below contract.

3—Where any part of the 25 per cent specified in Rule 2 shall be found to be No Grade or Sample Grade hay the state inspector shall, upon the application of one of the interested parties, appraise the value of this No Grade or Sample Grade hay and prescribe the discounts below the contract price to which the customer shall be entitled.

4—Where hay bought on contract calling for state grades is shipped with state certificates issued at loading point and customer calls for reinspection and the value of the adjustment called for by such reinspection amounts to as much as 5 per cent of the terminal value of the entire car, the customer shall have the right to charge the fee for such reinspection and the adjustments prescribed in Rule 2 to the seller. If, however, the adjustment called for by such reinspection is less than 5 per cent of the terminal value of the entire car the customer shall not be entitled to any adjustment whatever and shall pay for such reinspection.

5—Where hay is bought upon contract calling for delivery before a specified time at customers option, and shipment is not called for the seller shall have the option of cancelling contract and applying such advances that have been made, if any, to his losses on sale or charging such additional amount for the hay as may be sufficient to reimburse him for the carrying of same.

Hay Grades

No. 1 Highland Alfalfa, shall be Alfalfa 80 per cent pure, provided that not less than 15 per cent of the balance shall be tame grasses; may contain not over 5 per cent bleach, 2 per cent weeds or other worthless content, including not more than a trace of harsh bearded grasses and shall be sound, sweet, reasonably leafy and well baled.

No. 1 Timothy was recommended to be changed to 70 per cent purity instead of 80 per cent and Choice Timothy was recommended to be reduced to 90 per cent purity instead of 96 per cent.

The action of the Department of Agriculture upon these recommendations will be made known at an early date, as the recommendations of these meetings are not necessarily binding upon them.

FEED HIGHER IN NEW YORK

By C. K. TRAFTON

There was a complete reversal in the feed market during the past month. Buyers were in decidedly larger attendance and far more interest was manifested. This was particularly true of wheat feeds which suddenly became in good demand and with offerings conspicuously lighter prices quickly jumped to a higher plane. This was particularly true of middlings which were especially wanted and being scarce they advanced more rapidly than bran.

It was the consensus that the stronger tendency was caused by the advent of stormy and much colder weather throughout the West, but notably in the Northwest, where the temperature was low for the season. In some quarters it was also averred that the increase in the feeding of feed had been partly stimulated by the continued scarcity of corn and the resultant high cost.

Moreover many became convinced that it was safe to buy on a larger scale in view of the uncommonly high prices current, not only for wheat and rye but for all coarse grains. In a sense this opinion was confirmed in part by the greater buoyancy in barley, which was in active request including both malting and feeding grades for export.

From a purely local viewpoint, it was felt that the rising trend was partly due to the fact that stocks had been permitted to run down to a dangerously low plane, not only here but in other eastern markets. As long as the weather remains reasonably mild many distributors and local dealers

were apathetic, being inclined to hold off and let the market drift like a ship without a rudder.

Suddenly there was a complete reversal as virtually all buyers appeared to have awakened from their comatose condition, and as a result there was an almost unanimous improvement in the demand. In the meantime millers had become far less anxious to sell, and indeed some of them refused to make contracts for forward shipment excepting at appreciably higher figures. It was argued that this was warranted in part by a falling off in receipts of wheat at interior points which caused a rise in cash values. This was, of course, to a large extent the natural outcome of the extraordinarily large exports of wheat.

With the advent of real winter weather, low temperature with a heavy snow blanket over a wide area in the West, it was not surprising that the demand from all feeders became brisk. Larger quantities of corn or corn products were required and in many cases bids were raised materially, but unfortunately free trading was greatly hindered by the disappointing receipts, the low grading and the record breaking prices for the season.

The arrival of winter weather also led buyers to show more interest in linseed and cottonseed meal and slightly firmer figures were obtained but the demand was not sufficiently urgent to cause any noteworthy upturns.

Early in the month the offerings of beet-pulp were fairly large, including foreign and domestic and prices were barely steady, but afterwards the offerings became lighter and with the weather colder demand improved moderately resulting in a firmer undertone.

COMPARATIVE VALUES IN MIXED FEEDS

By ROBERT W. CHAPIN*

In making a comparison of the tables given in this book (edition of 1915), with a similar table in the edition of 1923, there is, so far as I can judge, by a rather detailed examination, no important change in 1923 from the figures used in 1915. Now what has happened since 1915? From a research bulletin, published April 27, 1915, by Hart and Humphrey, I quote the following:

In all the work that has been done on the protein requirements for milk production, no attention, so far as we are aware, has been given to the quality of the proteins used. Total digestible protein has been the guide.

This word "quality," which has since been much used, has a special technical meaning. Its meaning will perhaps be made clearer by the use of two words, "combining properties." To further convey this thought, I quote from Dr. Hart:

It is a fallacy to condemn a feeding material, because when used alone, or when used with certain other feeds, the results are unfavorable. If combined with still different feeds, the results may be entirely satisfactory.

Also to quote from Dr. Armsby:

For years the protein of feedingstuffs has been treated as if it were a single chemical substance. The more recent investigations into the chemistry and physiology of the proteins have resulted in an entire change of views. Both maintenance and milk production requires not protein as such, but certain amounts and proportions of the different amino acids.

The amino acids derived from corn are different in kind and in amount from those derived from cottonseed meal. Every kind of feed, grain and roughage varies in this respect.

If this more modern conception of the science of animal nutrition is correct, and I may say it has been proven correct by many hundred experiments since 1915, then these H. and M. tables, which assume to give a definite factor of protein digestibility for each kind of grain, feed, or roughage, are no longer authoritative for compounding dairy rations. Correct figures can only be given after testing combined groups of feeds with milking cows and then such figures apply only to exactly that combination.

What facts can be offered to justify this statement, that the H. and M. tables are incorrect to use as basis for formulating dairy rations? Perhaps the first research worker to demonstrate by actual experiment, and also call attention to the fact that the results he obtained did not agree with the H. and M. tables, was Professor C. H. Eckles of Missouri. In his Research Bulletin No. 4, dated 1911, he gives complete figures showing that with the Jersey cows tested, when fed for milk production, where the book figures called for a protein digestibility of 70.2 per cent, the actual digestibility was 59.7 per cent.

Without giving all of the subsequent experiments which clearly demonstrate the inaccuracy of these H. and M. Protein Digestion Tables, for combined rations, I will give the results from a sufficient number to clearly show their inaccuracy and to prove that there is a wide difference between the H. and M. figures and those obtained by very careful tests made with dairy cows.

Practically every research worker in the field of nutrition has recognized that these tables were

From an address by Robert W. Chapin, president of Chapin & Co., Chicago, at the annual convention of the Association of Feed Control Officials, Washington, D. C., October 23, 1924. Continued from page 359 of the November AMERICAN GRAIN TRADE.

not accurate, and has commented on it, but they have seemed unwilling to face the fact that they were not only inaccurate, but seriously so. The results of these test experiments are interesting.

From these experiences it will be seen that in the 36 Forbes experiments, the "book" digestibility is too high by 25 per cent. And in the 32 experiments by Hart, the difference was practically the same, the "book" digestibility being 23 per cent above the actual figures. Each one of the above tests was made for a considerable length of time, nearly all of them being a three weeks' continuous test, and some of them four weeks.

All of the feeds used were individually analyzed; in fact, every detail of these experiments was accurate and exact, as we would expect with Dr. Forbes and Dr. Hart supervising them. They were made with various combinations of feeds and roughages, including Alfalfa, Clover, Timothy, corn stover and silage, for the roughages used, and cornmeal, linseed meal, cottonseed meal, bran, gluten feed, distillers' grains, for the concentrates. The rations were fed to several types of cows, including Holsteins, Ayrshires, Jerseys and Guernseys. The experiments by Dr. Hart covered a period of four years, and those by Dr. Forbes an equal length of time, so any factor of experimental error may be considered eliminated.

One may well wonder why these H. and M. digestion tables have been so much quoted and used, even after the experiments just quoted were common knowledge. The explanation which Dr. Armsby offers is perhaps a correct one: "The human mind craves a recipe, and there has been a persistent tendency to substitute for the study of the principles of nutrition, a series of studies in applied arithmetic."

However, when one is doing sums in arithmetic, it is well to be sure that calculations are not being made on the basis of 44 inches to the yard, when the correct figure is 36. No consideration of the dairy ration problem can be complete without some reference to the "open formula" rations which have been so much in the limelight for the past three years. These are now being furnished from one common manufacturing source, to six different groups of co-operative organizations.

The appeal of the dairyman to buy the "open formula" ration has been an appeal to three motives:

1. An opportunity for saving, by avoiding the costs of distribution through the retail dealer.
2. An opportunity for profit by successful speculation.
3. A feed of supposed superior quality, the published claim being "these formulas represent the best judgment of the feeding experts of the 14 Eastern Colleges of Agriculture."

I shall speak of these three appeals in the order shown. First, as the plan followed has worked out, there is no saving in the cost of distribution, due to the fact that the overhead cost of the central offices of each organization, plus the \$1.50 per ton or \$2 per ton allowed the local agent who supervises the unloading and collects the cash payments, is equal to an amount which any retail dealer would be glad to accept, and find profitable could he sell for spot cash and car door delivery. If the farmer understood that this central office expense, plus the local agent's charge, amounted to nearly \$3 per ton, he would not be so impressed with the idea of "cutting out the middleman."

Second, as to the opportunity for profit by successful speculation, it may be said "important if true." In a circular issued urging farmers to buy under this plan, the statement is made: "Nine years out of 10, feeds are cheaper in summer than in winter, and the difference over a series of years averages about \$5 per ton."

If this were a correct statement, or even in accordance with easily ascertained facts, everybody who is now speculating in grain or stocks ought to know of this opportunity for such a sure thing in the way of profits. This speculative appeal has developed a really humorous aspect this fall. The Pennsylvania co-operative organization "points with pride" in their public advertisements to the fact that they have purchased the winter supply for their members during the summer months, and all should be well.

The Eastern States Exchange has, I am told, informed their members that they did not purchase feed this summer because it was too high and that they expect to buy the feed required, at a lower figure, later on in the fall or winter. Speculation in feed "by the calendar" is apparently just as much of a problem as making up rations by arithmetic.

Now, as to the much discussed "open formula," there is no real reason why these large co-operative organizations, backed and directed as they are by men of standing in the agricultural field, should not have done more than they have for their members. What has been the stumbling block? To my mind it has been an endeavor to name a low price per ton on the feed furnished, to justify the promise of speculative profits, rather than determination to furnish a feed which would make milk at a low cost per 100 pounds.

If a recent trade paper item is correct in stating that the profits made in two years by the central

mill making these feeds was \$1,750,000, it would seem as if it might have been possible to supply better feeds than those furnished to the members of these co-operative organizations. As the whole purpose of this paper is to deal with ascertained facts, I will give the results of a test, made from April 14, 1924, to May 14, 1924, at the New York State School of Agriculture, Canton, N. Y.

A group of 20 cows was used to test out four feeds. None of these feeds was manufactured by my firm, so these facts are given without any personal interest on my part. Of the four feeds tested, one was the "GLF" Milkmaker 24 per cent feed, the original open formula. The showing which the feed made was as follows: Total milk produced: The open formula 24 per cent feed produced the least milk of any of the four feeds tested, the quantity being 14 per cent less than the ration making the best showing. Pounds of feed required to make 100 pounds of milk: The "open formula" 24 per cent feed required 33½ pounds of feed to make 100 pounds of milk. Another feed, a 20 per cent "secret formula," required 30 pounds of feed to make 100 pounds of milk.

As previously shown, this would make the valuation of the "open formula" feed \$5 per ton less than the 20 per cent feed, for economy in milk production, without taking into account the loss in milk.

The fact that state institutions with their facilities for accurate work are testing specific rations for comparison, one with another, is one of the most encouraging signs of progress in the right direction. Such tests are worth a hundred-fold more to the dairy industry of this country than what Dr. Armsby termed "studies in applied arithmetic."

We may see the day when any trademarked ration offered for sale, whether a private or public formula, will not be licensed unless officially tested, not for "digestible proteins," but for rate of milk production. In the meantime, the dairy-men can very easily determine what any ration will do, with his own cows. To the extent that he does this, before he decides whether the cost per ton is high or low, he will solve for himself one of the vital problems of this nation-wide industry.

LOCAL FEEDING SCHOOLS FOR RETAIL DEALERS

By PAUL MEHL*

On December 2 the first session of the first retail feed dealers' feeding school under the direction of an agricultural college was held at Danbury, Conn. The men met in the agricultural county agent's office on the evening of the day named. Not all were proprietors of the stores located in or near that city, for they brought with them those employees who come in contact with the customers from day to day. The meeting was considered a decided success, as had been anticipated because those dealers who were visited in advance had revealed a keen desire to have such a school started.

Two additional feeding schools will be held after the first of January. One will be located at New Haven, Conn. and the other at Norwich, Conn.

Last July the dealers in attendance at the Storrs Dealers Conference requested the Extension Service of the Connecticut Agricultural College to arrange for the conducting of such schools throughout the state. It was thought that in this way a part of the information given at the Storrs meetings could be made available to those dealers who could not find it possible to attend, and in particular the employees who are unable to leave the store or warehouse for a few days.

The intention is to have these feeding schools supplement rather than take the place of the annual conference, for at the annual meeting special speakers are secured to talk on various subjects. Of course, it is impossible to have the lectures given by these special men given at local meetings because they do not have the time to speak and the expense would be too great.

The course will consist of a series of six lectures which will be given by Mr. Merrill and Mr. Simms, the two feeding experts in the employ of the college. Four of the lectures pertain to the feeding of cows and two are devoted to horse feeding. One lecture will be given one evening each month for a period of six months and should those in attendance wish to continue the series arrangements will be made to add a couple more on poultry feeding and other subjects. The following is a topical outline of what is contemplated at present:

First Meeting: Composition of feedingstuffs, Composition of animals, Digestion of feeds, Uses of feed by animals.

Second Meeting: Nutritive value of feeds, Variations in chemical composition of feeds, Conditions affecting digestibility of feedingstuffs.

Third Meeting: Calculating of rations, Different methods of balancing rations, Relative values of feed-instances.

Fourth Meeting: Discussion of roughage feeds, Discussion of concentrates, Suggestions for use of grain

dealers in making up rations for would-be purchasers, Relation of minerals to the animal system.

Fifth Meeting: The alimentary tracts of the horse and the cow: Stomachs compared, intestines compared, bacterial action in alimentary tracts; Use of food by horse; Energy: Gross energy, available energy, net energy; Net energy of concentrates and roughages for horses; Factors affecting energy required for work; Form of the animal, speed of the animal, training of the animal.

Sixth Meeting: Nutritive ratios and feeding standards; Differences in, with reasons therefor; Factors affecting; Rations used in Connecticut: One grain and one roughage, mixed grain and one roughage, feeding according to price of feeds, results of tests with Bridgeport Ice Delivery Company and other co-operators, some experiment station data.

The purpose, of course, is to aid the dealers in acquiring a better working knowledge of feeds and feeding practices so that he will be in a more favorable position to discuss such subjects with his patrons. With more information on this subject, it is expected that the men will prove to be more efficient salesmen, as well as be in a position to advise producers who through ignorance are not getting the best results from the feeds they buy under the present conditions.

The information acquired at the feeding schools ought to prove of assistance to a dealer or his employees in case a producer complains that a certain brand of excellent feed does not yield the results hoped for. Sometimes the trouble is not with the feed but an improper use made of it by a customer. If the men who meet the farmer from day to day are able to intelligently ask questions, they may be able to discern the reason why the complaining customer is not getting results, and suggest what to do to secure the maximum benefits to be derived from the proper use of the brand of feed sold.

Both Mr. Merrill and Mr. Simms are anxious that the men bring in questions that come up daily in their stores for discussion, as it is the desire that the course be made as practical as possible so that it will be of the greatest immediate benefit to the men and not appear too theoretical.

The principal things which it is hoped the proposed plan will accomplish are: First, educating the feed dealer and his men so that they may be better salesmen; second, assisting the college by dealers educating customers as to the best feeding practices, especially foreigners; and third, showing dealers how to mix feeds and formulate rations to achieve the best results.

NEW FEED BRANDS

"SACCO" hog feed. The Smith Agricultural Chemical Company, Columbus, Ohio. Filed September 11, 1924. Serial No. 202,520. Published November 11, 1924.

"SMITH'S SACCO" hog feed. The Smith Agricultural Chemical Company, Columbus, Ohio. Filed September 11, 1924. Serial No. 202,523. Published November 11, 1924.

"DU-MOR" stock food. Molasses Feeds Company, St. Paul, Minn. Filed July 18, 1924. Serial No. 200,214. Published November 18, 1924.

"AMERICAN STANDARD" scratch feed, horse feed. Charles Schaefer, deceased, late of Brooklyn,



N. Y., by Charles Schaefer and Fred W. Schaefer, executors, and Mrs. Louise Schaefer, executrix, Brooklyn, N. Y., doing business as Chas. Schaefer & Son. Filed January 23, 1924. No. 192,465. Registered and published December 2, 1924. (Not subject to opposition.)

Trademarks Registered

191,825. Animal feeds. Walter W. Payne, Huntington, W. Va. Filed June 27, 1924. Serial No. 199,242. Published September 9, 1922. Registered November 18, 1924.

191,828. Poultry feed. Eddie Mill & Elevator Company, Oklahoma City, Okla. Filed July 2, 1924. Serial No. 199,465. Published September 9, 1924. Registered November 18, 1924.

191,877. Mineralized feed. Earl Rhine, doing business as Oelwein Chemical Company, Oelwein, Iowa. Filed May 8, 1924. Serial No. 196,763. Published September 2, 1924. Registered November 18, 1924.

191,879. Horse, dairy and scratch feed. Security Mills, Knoxville, Tenn. Filed April 23, 1924. Serial No. 196,033. Published September 2, 1924. Registered November 18, 1924.

191,888. Horse and mule feed and cow feed. Western Grain Company, Birmingham, Ala. Filed July 11, 1923. Serial No. 183,092. Published September 2, 1924. Registered November 18, 1924.

192,248. Poultry feed. Kasco Mills, Inc., Waverly, N. Y. Filed February 4, 1922. Serial No. 158,874. Published September 16, 1924. Registered December 2, 1924.

FEED NOTES

The Bullard Feed Store at Newton, Ga., has been taken over by M. C. Gause.

C. S. Pike of Van Nuys, Calif., is installing additional equipment in his feed mill.

Joseph Penny has sold his interest in the Auburn Feed Store to Jesse Brooks.

Charles Jamison of Bloomfield, Ind., has bought the Richland Feed Store from Ben Dugger.

Roy E. Melton is manager of the Southern Feed Store which has been opened at Lonoke, Ark.

The Decatur Flour & Feed Company has been incorporated at Decatur, Ind., by Gilbert Strickler.

A feed and flour business is being opened at Dresser Junction (Osceola p.o.), Wis. by A. N. Stacy.

Rankin & Shepherd are contemplating installing a feed mill at Chester, Ark., 25 miles north of Van Buren.

The name of E. C. Muff & Son at Fountain City, Ind., has been changed to the Muff Feed & Coal Company.

The Holiman-Brown Feed Company of Memphis, Tenn., has changed its name to the Holiman Feed Company.

Extensive improvements have been completed at the plant of the United Feed Company of Toms River, N. J.

Columbus Glassman and E. A. Jacobs have opened a new feed and fuel business at Tucson, Ariz., as the Jacobs Fuel & Feed Company.

A feed and flour brokerage business will be conducted by the partnership between Harvey N. Pinick and Albert C. Smith of Columbus, Ohio.

A feed department is being added to the business of the Portland Elevator Company of Portland, Mich. Other side lines are also to be carried.

Capitalized at \$10,000, W. L. Caldwell, J. M. Ramsey and G. C. McGimsey have incorporated at Lenoir, N. C., as the City Flour & Feed Company.

A feed and coal business is to be started at Duncansville, Pa., for Lawrence P. Swoope. The building and property were formerly used by the owners as a coal yard.

W. S. Misenhimer has established a feed and flour store at Ft. Smith, Ark. He was formerly salesman there for the O. Q. Hall Flour & Feed Company.

There is likely to be a good demand in these countries this year for oil cake and meal, for which the United States and Russia are the chief sources of supply.

H. D. Craig, Joseph Mideke, Jr., and others have incorporated at Shamrock, Texas, as the Cotton-By-Products Feed & Milling Company. The firm is capitalized at \$10,000.

J. G. Hardison is president and D. G. Grubbs, secretary of the recently incorporated Seaboard Feed & Fuel Corporation of Norfolk, Va. The firm is capitalized at \$50,000.

To buy and sell hay, The Oregon Hay Growers of Hermiston is incorporated at Hermiston, Ore., capitalized at \$2,500. R. W. Gilbraith, C. W. Tilden and Lee Mead are interested.

The stock and equipment of the R. C. Gransom feed and fuel store at Corona, Calif., have been bought by McNichol & Johnson of Arlington. A. E. Smith of Corona will be in charge.

To deal in feed, flour and general merchandise, Bennett & Cole, Ltd., of Elmira, N. Y., were incorporated, capitalized at \$20,000. C. M. Bennett, L. H. Cole and Clara Leverich are interested.

Cliff S. Martin is now back in the hay business at Ashland, Ohio, at 111 Maple St., Mr. Martin was out of the business for a time; formerly he was with the A. G. Smith Milling Company of Wooster, Ohio, as manager of their hay department.

A company has been organized by the Miller Grain Company and others at McPherson, Kan., for the manufacture of a line of mixed poultry feeds. A four-story building is under erection. M. L. Miller will be manager and N. S. Rhodes, general salesman.

The Callanan Bros., old time feed dealers of Buffalo, N. Y., have retired after several years in business. The office will be occupied by William S. Doyle who has been in the feed business for some time past and Basil Burns, grain dealer and member of the Burns Bros. Grain Corporation which is being liquidated.

An unusual school of salesmanship was held by the Ralston-Purina Company for its salesmen and feed merchants handling its products around Raleigh, N. C., on November 20 and 21. Instead of the old method of lecturing to the dealers, the executives and the dealers themselves operated a feed store during the two-day period, selling all classes of consumers. About 75 feed merchants attended the conference which proved to be entirely satisfactory both to the company and to the dealers themselves.

*Paul Mehl was formerly marketing specialist at Connecticut Agricultural College.



THE DAKOTAS

The Farmers Elevator Company of Carbury, N. D., is being managed by Adolph Maum.

J. W. Brenner has bought the Equity Elevator at Sanborn, N. D., and will operate as the Sanborn Elevator Company.

The Bentley Equity Exchange of Bently, N. D., expects to install a truck dump and do some overhauling next spring. H. J. Grove is manager.

The elevator of T. B. Beiseker at Fessenden, N. D., has been sold to the Osborne-McMillan Elevator Company. Tom Crissman will manage it.

The elevator of the Kaylor Farmers Elevator Company at Kaylor, S. D., replacing the one which burned last summer, has been completed.

E. O. Dickinson is operating at Tioga, N. D., under the name of the E. O. Dickinson Grain Company. He recently bought the Farmers Elevator there.

P. B. Getchell of Minneapolis has bought the interest of F. H. Dutte and the Lollis Estate in the Valley Grain Company at Warwick, N. D. Melvin Peterson retains his interest in the business. B. B. Getchell is president and Melvin Peterson, manager.

IOWA

The Farmers Co-operative Elevator at Belmond, Iowa, has installed a combined grain cleaner and dryer.

The Gilchrist Elevator at Jackson Junction, Iowa, has been bought by George Taylor and G. A. Meyer.

O. M. Johnson & Co. of Huxley, Iowa, are succeeded at Huxley by the Huxley Lumber & Grain Company.

A 50-horsepower motor has been installed in the elevator of the Davenport Elevator Company at Davenport, Iowa.

The Farmers Elevator Company has equipped its coal sheds at Milburn, Iowa, with a new scale. The elevator in the elevator has also been remodeled.

The elevator at Nevada, Iowa, has been bought by D. Brastad of Trundy Center from Wyatt Dunkelberger. The Clark Brown Grain Company holds a long time lease on the plant.

Harry Bookey is president, Wm. Mason, vice-president, and Burt Sanders, secretary and treasurer, of the Levey Grain Company which has been organized at Levey (Avon p. o.), Iowa. The firm is capitalized at \$10,000.

Stewart & Co., of Pleasantville, Iowa, are building a new grain elevator replacing the old house which is to be torn down. The new plant will have a capacity of 14,000 bushels. All machinery will be electrically equipped. There will be a feed mill in connection with the elevator.

WESTERN

The Robinson & Wyatt Grain Company of Salina, Kan., is to erect a grain elevator at Bovina, Colo.

The Seattle, Wash., offices of Kerr, Gifford & Co., have been reopened after being closed for three months. Philip Benedict of Spokane is manager.

Alonzo F. Smith and Alice M. Smith have incorporated at Auburn, Wash., as the Smith Grain & Milling Company. The firm is capitalized at \$10,000.

A grain elevator of 30,000 bushels' capacity has been moved from Gilman to Augusta, Mont. The Great Northern Railway is being extended to Augusta.

A new warehouse for handling grain has been opened at Provo, Utah, for the Wasatch Produce Company. The company also carries a full stock of flour and feed.

Articles of incorporation have been filed for the Pease Grain Company of Seattle, Wash. J. A. Pease will be president of the firm which is capitalized at \$100,000.

The grain and mill products business of L. W. Spaulding at Glendora, Calif., has been sold to Charles Wilson. Mr. Wilson bought the hay business two years ago.

The Clallam Grain Company of Sequim, Wash., has bought the interest of C. C. Hauptly in the

Hauptly Feed Company of Port Angeles, Wash. The place will continue to run under the name of the Hauptly Feed Company but will be under the direction of A. S. Marler.

The elevator at Deertrail, Colo., is now owned by the Ady & Crowe Mercantile Company of Denver.

Capitalized at \$50,000, the Great Basin Grain Company of Ogden, Utah, has filed articles of incorporation at Boise, Idaho. P. E. Rigby of Idaho Falls is authorized agent in Idaho.

The brick warehouse of the Nicholls Grain Company at San Jacinto, Calif., has been bought by the Dairy Feed & Grain Company which will use it for the warehouse of the association.

J. W. McCrea has bought the interest of George O. Dart in the Coeur D'Alene Grain & Milling Company of Coeur D'Alene, Idaho. Mr. Dart has moved to Dartford, Neb., because of poor health. He first engaged in the milling business at Coeur D'Alene in 1908.

EASTERN

Z. G. S. Collins and M. M. Slocum have incorporated at Trenton, N. J., as the Trenton Feed & Grain Company. The firm is capitalized at \$10,000.

M. C. Record, C. L. Record and W. W. Hopkins have incorporated at Havre de Grace, Md., as the Belair Elevator Company. The firm is capitalized at \$10,000.

The new elevator of F. W. Shaw at Cumberland Center, Maine, is ready for operation. It has a capacity of from 45 to 50 cars. Facilities for grinding are also included. Sprout, Waldron machinery is used.

To deal in grain, flour, hay and feed, the Oneonta Feed & Grain Exchange, Inc., has been incorporated at Oneonta, N. Y., capitalized at \$25,000. J. S. Lauren, D. P. Lauren and E. A. Atchison are interested.

The retail department of the R. O. Eaton Feed & Grain Company at Norwich, N. Y., has been discontinued. The company is now concentrating its interest in its wholesale grain and feeds. The firm started in 1838.

The Barnett & Record Company has the contract for the new 1,000,000-bushel elevator which the Saskatchewan Co-operative Elevator Company, Ltd., is building at Buffalo, N. Y. Actual construction work will not be started before spring.

The Electric Elevator at Buffalo, N. Y., has been bought by Nesbit Grammer, president of the Eastern Grain, Mill & Elevator Corporation. The elevator is of modern construction with two towers and two marine legs and has capacity of 2,000,000 bushels. Possession will be given April 1. The purchase is the result of the retirement of Powers & Co., from elevator operation in Buffalo.

The Hecker-Jones-Jewell Milling Company, controlled by the Standard Milling Company of New York City, has bought the H-O Company of Buffalo and the H-O Cereal Company, Ltd., of Ayr, Ont. The property consists of a series of grain elevators, mills and cereal plants. The Hecker cereal plant and the H-O mill will be consolidated and the machinery and equipment of the Hecker cereal concern will be moved from New York City to the H-O plant at Buffalo.

INDIANA

The Farmers Fuel & Feed Company has been incorporated to operate at Lapel, Ind.

A certificate of dissolution has been filed by the Nickle Grain Company of Winchester, Ind.

The elevator at Monroeville, Ind., has been bought by L. A. Deboit. He sold the elevator two years ago.

The name of the Gas City Elevator Company of Gas City, Ind., has been changed to the Gas City Feed & Grain Company.

The Price's Elevator & Grain Company of Griffin, Ind., has extended the term of their existence to 10 years from November 19, 1924.

A new grain and feed store has been opened at Brownstown, Ind., by Henry Lucas. He was connected with the co-operative elevator at Brownstown for several years.

The 25,000-bushel tile elevator, tanks and mill of the Farmers Grain & Feed Company at Marion, Ind., are now owned by A. W. Maegerlein. He

handles flour, feed, coal and other things as sidelines and operates as the A. W. Maegerlein Mill & Elevator.

Norman L. Bradfield has bought the interest formerly held by the Goodrich Bros. in the Nickel Grain Company at Nickel (Valparaiso p. o.), Ind. He will operate under his own name.

The elevator and residence of Eugene Lewis, proprietor of the Lewis Grain Company at Cottage Grove, Ind., has been sold by him to Charles Douglass who will take charge the first of the year.

Capitalized at \$20,000, the Ainsworth-Boone Company has been organized at Kentland, Ind., to deal in grain and seeds. The incorporators are Harry C. Ainsworth, George I. Boone and Roy A. Stanton.

Plans are under consideration for the erection of a grain elevator at Michigan City, Ind., to provide facilities for exporting grain direct via the Great Lakes and the St. Lawrence River to Europe.

L. J. Linebarger, J. A. Linebarger, H. A. Linebarger, A. J. Linebarger and Atha Linebarger have incorporated at West Union, Ind., as the Linebarger Elevator Company to deal in grain. The firm is capitalized at \$5,000.

To deal in grain and farm products, the Evansville Grain Company has been incorporated at Evansville, Ind. The company is capitalized at \$50,000. Charles H. Vincent, Frank Hudgens and Samuel B. Bell are interested.

The Faroll Grain Company, a new company, has leased the elevator at Schneider, Ind., the property of the New York Central Railroad. It is being overhauled somewhat and put into condition for business. Barnett Faroll is president; George LeBeau, vice-president and Jos. Faroll, treasurer. The two Farolls operate at Chicago as the Faroll Bros. and Mr. LeBeau was until recently with Bartlett Frazier Co.

ILLINOIS

The Hayward Bros. of Cooksville, Ill., have gone out of business.

The J. T. Riemke Elevator at Pesotum, Ill., is now owned by Eichhersh & Reinhart.

The Farmers Grain & Service Company of Astoria, Ill., is to be reorganized.

Tony Morick is now associated with the Farmers Grain Company of Walnut, Ill.

The Camp Grove Farmers Elevator Company of Camp Grove, Ill., has been dissolved.

C. H. Faith has sold his grain elevator at Warrensburg, Ill., to Edwin Jokisch of Decatur.

The elevator of J. T. West & Sons at Loda, Ill., has been sold to Mr. Moore of Malvin. Chester West will be manager.

At public auction in November, the two elevators belonging to the estate of Edward Hendrix at Clinton, Ill., were sold.

A new office has been erected for the Farmers Elevator Company of Danforth, Ill. The company was organized 17 years ago.

J. E. Collins & Son have bought the grain elevator of F. W. DeHart of Arthur, Ill. Collins & Son are grain dealers of Tuscola.

A new office building is being erected at Orion, Ill., for the Ophium Grain Company and a new 10-ton truck has been installed.

An electric Brown-Duval Moisture Tester has been installed in the elevator of the Farmers Elevator Company of Rushville, Ill.

The elevator of the Young Bros. Grain Company at Stonington, Ill., has been sold to Hight & Cline of Decatur. Otto Young will be manager.

Improvements are being made at the elevator of the Farmers Co-operative Company at Flatt, Ill., and grinding machinery is being installed.

The Fairbury Farmers Grain Company's elevator at Fairbury, Ill., has been equipped with a new leg and truck dump and the elevator has been repainted. T. D. Karnes is manager.

A 1,200-bushel per hour Union Iron Works Corn Sheller has been installed in the elevator of the Farmers Grain Company at Dalton City, Ill. A 50-horsepower engine was also installed.

The elevator of the Strawn's Crossing Farmers Elevator Company at Jacksonville, Ill., has been bought by the F. J. Blackburn Elevator Company. The firm now owns three elevators, at Jackson-

ville, Sinclair and Strawn's Crossing. The Blackburn company recently sold its elevators at Riggs-town and Naples to the Jacksonville Grain & Commission Company.

John F. Hubbard, George H. Hubbard and R. Woodcock have incorporated at Chesterville, Ill., as the Chesterville Grain Company. The firm will deal in grain, grain products, coal and oil.

L. T. Jones is no longer manager for the four L. T. Jones & Co.'s grain elevators in Christian County, Illinois, but is assistant manager for the Peerless Mill & Elevator Company at Springfield, Ill.

Frank J. Delany has bought the Midwest Elevator at Chicago, Ill. His firm specializes in the sale of feed materials to mixed feed millers and the Midwest house is well suited for these purposes.

A 10-horsepower motor has been installed in the elevator at Otto (Kankakee P. O.), Ill., and the elevator is being repainted and improved. Charles J. Schrader and John H. Schrader are the owners of the property.

Martin Schultz is connected with the Columbia Malting Company of South Chicago, Ill. He was formerly superintendent of the E. & R. Grain Elevator at Cicero, recently taken over by the J. I. Badenoch Company.

The Pike Milling Company of Griggsville, Ill., has changed its name to the Pike Mills. Fred A. Stone is proprietor, having bought the business from Charles J. Bickerdike. He will handle flour, feed, coal, coke, wood, ice and grain.

L. C. Ohmes and Carl R. Debner have gone into the grain business at Lincoln, Ill., and have bought the John F. Maurer Elevator at Johnson Siding. The elevator has a capacity of 50,000 bushels and has for two years been operated by John Maurer. Mr. Ohmes will be in active charge of the elevator.

OHIO AND MICHIGAN

Men from Brookville, Ohio, have bought the grain elevator at Union, Ohio.

W. H. Hill & Sons of Oakwood, Ohio, has changed its name to W. H. Hill.

The elevator of J. W. Mendenhall at Greenville, Ohio, has been bought by C. C. Mendenhall.

The grain brokerage business of A. Felty at Circleville, Ohio, is to be managed by W. L. Funk.

The elevator of the Hirsch Bros. Grain Company at Leipsic, Ohio, has been sold by it to P. W. Davis.

The McBain Grain Company of McBain, Mich., has increased its capital stock from \$35,000 to \$75,000.

Charles Bloom is now manager of the Farmers Grain & Supply Company of Camden, Ohio, succeeding J. F. Decker.

The property of the Pinconning Bean & Grain Company at Pinconning, Mich., has been taken over by the Cass City Grain Company.

The Gleaners Clearing House Association Elevator at Reed City, Mich., has been bought by Will Curtis. He will not operate the plant.

The Yale Elevator Company succeeds the Brockway Farm Bureau Elevator at Yale, Mich., and has bought the plant and coal yards of Wharton & Co.

Slutz & Sims Feed & Lumber Company has changed its name to the Slutz & Sons Elevator Company. The company operates at Fredericksburg, Ohio.

The Coldwater Grain & Coal Company has bought the plant of the Farmers Equity Exchange at Coldwater, Ohio. New grinding machinery is being installed.

The Three Rivers Co-operative Association of Three Rivers, Mich., has reorganized as the Three Rivers Co-operative Exchange Company. The new organization has taken over the elevator of C. L. Seekell & Co., which will be conducted with another elevator.

The elevator at Continental, Ohio, known as the Kimmel Elevator and the elevator at Hartsburg, owned by Charles Ray, have been bought by T. B. McDonald of La Porte, Ind.

Three grain elevators at Sugar Ridge, Dowling and Dunbar, Ohio, have been taken over by Charles Shuler. He was until recently in charge of the elevator at Oakwood.

The elevator of the J. F. Martindale at Pine River (Standish p. o.), Mich., has been bought by the Cass City Grain Company and will be operated as the Pine River Bean & Grain Company.

Improvements are being made to the plant of the Carey Mill & Elevator Company of Carey, Ohio, including the installation of a modern coal yard with mechanical equipment for coal handling.

The new elevator of the Deshler Farmers Elevator Company at Deshler, Ohio, is now ready for occupancy. The company's two elevators burned last spring, and instead of rebuilding both, the firm built one large concrete building with a great-

er capacity than the two old ones. Modern machinery has been installed, and a separate brick office building has been erected.

The McDonald Company has turned back the Cissna Elevator at Washington C. H., Ohio, which it operated under lease, and it is being operated under the name of the Cissna Feed & Grain Company.

Charles O. Etzler & Son have bought the plant of the defunct Arcanum Equity Exchange Company at Verona, Ohio. Mr. Etzler, Sr., had been with the plant for 28 years, first with Werts, Brown & Rowe, then with the Equity.

The Fristoe Grain Company has taken over the management of the Kirkwood Grain & Supply Company at Kirkwood, near Piqua, Ohio. The elevators have capacity of 80,000 bushels. Chester A. Foulder of Pemberton is manager.

A modern elevator has been built at East Orwell, Ohio, by L. H. Behner on the site of the old warehouse. The warehouse is of brick and fireproof tile, having a 1,200-ton bulk and 1,800-ton bag storage. It will be completed January 1.

The Albert Todd Company has bought the former A. W. Green Elevator at Corunna, Mich., owned and operated for seven years by the Farmers Co-operative Elevator Company. The Todd company's elevator at Kerby burned recently.

MISSOURI, KANSAS AND NEBRASKA

The Farmers Elevator at Amoret, Mo., has been bought by J. R. Hiatt.

W. L. Ekel is now with the B. C. Christopher Grain Company of Dodge City, Kan.

Sherman Roseberry is manager of the Farmers Elevator at Strauss (McCune p. o.), Kan.

Repairs are being made to the elevator of the R. A. Heacock Company at Shubert, Neb.

G. W. Shell of Garden City, Kan., has bought the Abrahamson Elevator at Garfield, Kan.

Another elevator is being erected for the St. John Farmers Co-operative Association of St. John, Kan.

The Northern Republic Elevator at Republic, Kan., has been sold by Homer E. Clark to E. E. McClure.

The elevator at Harwood, Mo., has been bought by M. D. Grider of Appleton City who will open for business.

A new elevator is to be built at Harbine, Neb., for the Wright Lee Company replacing the one which burned.

The plant of the Farmers Grain & Stock Company at Greenwood, Neb., has been equipped with electric power.

The Abilene Flour Mills Company has taken over the elevator of the Farmers Elevator Company at Longford, Kan.

George Bros. of Earlton have bought the McNulty Elevator and office building at Thayer, Kan. They will continue to operate it.

The elevator of the Farmers Co-operative Company at O'Fallon, Mo., is to be managed by V. C. Orf. He takes his place January 1.

A dump and car loader to take care of snap corn are being installed in the elevator of the Sturgeon Elevator Company at Sturgeon, Mo.

McPherson & Co., of Omaha, Neb., have bought for \$11,500, the property of the Crete (Neb.) Farmers Mill & Elevator Company.

The Vickers Grain & Seed Company of Liberal, Kan., has bought the elevator at Milner, Kan., operated by the Gano Grain Company.

Earl R. Brown is succeeded as manager of the Eskridge Farmers Co-operative Association at Eskridge, Kan., by Lewis Thompson.

The elevator at St. Paul, Kan., formerly owned by the Pearl Roller Mills Company of Oswego, Kan., has been bought by Frank O'Brien.

Electric motors have been installed in the elevator of H. L. Stewart Grain Company at McCune, Kan. Another elevator leg was also installed.

A new elevator is being built at Portageville, Mo., by J. C. McCrate to operate in connection with the mill. The plant will be operated by electricity.

Two new grain bins of a 1,000 bushels' capacity are being erected at Burlington, Kan., for E. H. Kaufman of the Gridley Grain & Produce Company.

C. J. Johns is succeeded as manager of the Farmers Grain & Elevator Company at Glenwood Park, near Kearney, Neb., by Chas. Howe of Memphis, Neb.

W. R. Bullen has resigned his position with the Farmers Mill & Elevator Company at Concordia, Kan., as manager. He has bought property of the Wolfsberger Elevator Company, at Minneapolis, Brewer, and Lindsey, Kan.

The Missouri Pacific Railroad is to spend \$500,000 for increasing the storage capacity of its Kansas City, Mo., elevator by 500,000 bushels. The handling capacity is to be increased from 75 to 125

cars daily. The elevator is operated by the Hall-Baker Grain Company.

The Southern Grain Company of Dexter, Mo., has changed its name to Bowman & McColgan.

The Fullerton Lumber Company has bought the property of the Crowell Lumber & Grain Company at Wakefield, Neb.

The Maysville Roller Mills at Maysville, Mo., have been remodeled by the new Farmers Elevator Company into an elevator.

A new 10,000-bushel elevator is to be erected at De Soto, Kan., for C. E. Sheldon. The contract has been let for the house, which will be of frame construction.

The business at Windsor, Mo., formerly known as the Petty Grain Company has been bought by L. W. Lingle & Co. They will manufacture stock and poultry foods.

The elevator of Koons & Son at Houston, Neb., has been bought by W. L. Florer and T. H. Florer to settle the estate of Melvin G. Koons, Homer Koons will operate.

The new 35,000-bushel elevator of the Everly Grain Company at Garden City, Kan., has been completed. The elevator is equipped with modern grain handling machinery.

The elevator of the Nye-Schneider-Jenks Company at David City, Neb., has been opened for business under lease by L. E. Krajicek of Bruno. Coal will also be handled.

The Farmers Grain & Milling Company has been incorporated at Potter, Neb. Its capital stock is \$75,000. Fred Wickhorst, Oscar N. Redeen and Emil Carlson are interested.

The Harper Flour Mill and Elevator at Harper, Kan., have been bought from L. C. Kelly by David Jackman and associates of Wichita. The plant was shut down for two years owing to financial troubles.

The elevator of the Scoular-Bishop Grain Company at Lovewell, Kan., is being remodeled and the handling and loading capacity is being increased and new garner and distributors are being installed.

The 6,000-bushel elevator of the Derby Grain Company at Mitchell, Kan., has been bought by the Mitchell Grain Company which has also bought a 10,000-bushel elevator there. The company will operate both houses.

W. R. Reinking has bought the Highland Grain Company's elevator at Grand Island, Neb., and will do a retail feed and coal business in connection with grain handling. The firm name will be the Reinking Grain Company.

The Eagle Elevator at Kansas City, Mo., which has capacity of 70,000 bushels has been enlarged to 195,000 bushels. It will be used mainly as a kafir and milo storage house. It is in the hands of Henry Lichtig & Co.

A new sheller which will handle 500 bushels corn per hour has been installed by the Farmers Elevator Company of Bigelow, Mo. A new 8-horsepower, three phase electric motor, and new truck dump will be installed.

The Charles F. Howe Grain & Feed Company has been incorporated at St. Louis, Mo. Mr. Howe, president of the firm, is a member of the Merchants Exchange. The company will buy and sell ingredients for mixed feed manufacturers.

The elevator at North Kansas City, Mo., operated by the Norris Grain Company is to be increased in capacity 1,000,000 bushels. Its present capacity is 1,600,000 bushels. The Chicago, Burlington & Quincy Railroad is the owner of the property.

The elevator of the Peoples Elevator Company at Richhill, Mo., has been sold to the Farmers Grain Company. The two elevators will continue business as heretofore, but will be under one management with Frank Holland in charge. G. I. Lynch will take charge of the company's elevator here.

The elevator and mill property of the Glen Elder Mills, Glen Elder, Kan., has been bought by Ralph W. Dockstader, a grain dealer at Beloit, Kan. Mr. Dockstader plans to place the elevator in operation but has no plans for the operation of the 350-barrel mill. The Glen Elder Mills have not been in operation for the last year.

SOUTHERN AND SOUTHWESTERN

The Choctaw Grain Company of Choctaw, Okla., is installing a 10-horsepower electric motor.

The storage facilities of the Lenapah Grain & Hay Company of Lenapah at Delaware, Okla., are being increased.

The elevator property of the J. T. Lindsey Elevator Company at Bernice, Okla., has been bought by Mode & Downing.

The Burke County Milling & Marketing Company has been organized at Waynesboro, Ga., to conduct the grain elevator which was recently bought by Sidney Bates. The incorporators of the firm are:

S. B. Bates, J. F. McElmurray, John L. Boyd, Edgar Barger and W. M. Fulcher.

B. Thrasher is erecting a new feed mill and grain elevator at Dothan, Ala. The company will manufacture a complete line of feeds.

D. J. Reiter has bought the Orient Elevator at Sentinel, Okla., and will remodel the plant. He will handle grain, feed and coal.

The capital stock of the Stamford Mill & Elevator Company of Stamford, Texas, has been increased from \$30,000 to \$100,000.

The elevator at Beaver, Okla., formerly owned by the Sterling Grain Company has been bought by the Cox-Henry Grain Company.

A new elevator is being erected at the St. Joe Mill at Miami, Okla. The mill is being operated by Dr. Hull, under option to purchase.

John Henry, Lottie G. Henry and Anna Macy have incorporated at Enid, Okla., as the John Henry Grain Company. The firm is capitalized at \$25,000.

The Travis Grain Company, Inc., has been incorporated by I. L. Hyatt, Frank Springer and C. L. Bell at San Antonio, Texas. The firm is capitalized at \$10,000.

The elevator of the Sanders Bros. at Minco, Okla., has been bought by E. C. Wegener who will operate under the name of the E. C. Wegener Grain Company.

E. O. Billingslea, V. Billingslea and J. A. Burt have incorporated at Frederick, Okla., as the E. A. Billingslea Grain & Cotton Company. The firm is capitalized at \$50,000.

Capitalized at \$10,000, the Marshall-Masters Grain Company has been incorporated at Oklahoma City, Okla. S. A. Marshall, S. C. Masters and Guy Marshall are interested.

Offices and a new warehouse are being erected by the Lentz Bros. of Hendersonville, N. C. The building was made necessary by the steadily increasing business of the firm.

A grain elevator of 750,000 bushels' capacity is to be built at Fort Worth, Texas, for the Moore-Seaver Grain Company of Kansas City, Mo., of which Ben Moore is president.

The plant of the Dewey Mill & Elevator Company at Dewey, Okla., has been bought by Phillips & Pinkerton, who recently took over the grain elevator at Bartlesville, Okla.

Harry Smith is now manager of the Hacker Elevator interests at Jefferson, Okla. He was manager of the Hacker Elevator at Abilene, Kan., and is succeeded there by E. E. Roher.

The Pitts-Wells Elevator at Broken Arrow, Okla., has been bought by A. C. Hayes from W. J. S. Bower. The elevator will be operated under the same name with Dick Morrow in charge.

Andrew J. Donelson has entered into the grain and hay brokerage business which his father, Louis R. Donelson, conducted at Memphis, Tenn. He was for many years in the milling business.

To buy and sell at retail and wholesale, corn, cotton, cottonseed, hay, oats and other farm produce and to handle cotton on commission, the W. B. Lyman Company was incorporated at Sumter, S. C.

A large grain house is being erected at Carthage, Tenn., for the Carthage Grain Company. The plant will be equipped with machinery for handling corn and small grain. Lofton N. Fisher will be manager.

The Garza County Warehouse & Marketing Association, which deals in grain, cotton, flour, feed, produce, etc., is to erect a warehouse and storehouse with office building, all of brick construction, at Post, Texas.

J. A. Abernathy has sold the grain elevator and flour mill of the Floydada Mill & Elevator Company of Floydada, Texas, to the Boothe Bros., grain and coal dealers of Floydada. They will continue to operate the plant.

An additional story on the mill and a storage capacity for 200,000 bushels grain are to be built for the Graham Mill & Elevator Company of Graham, Texas. The contract calls for 17 concrete tanks of 30 bins each.

Frank Kell and his associates, including J. Perry Burrus, T. P. Duncan and T. C. Thatcher, have bought the mill and the elevator of the Texas Star Flour Mills at Galveston, Texas. The grain and flour exporting business of the new organization will be materially increased through the Galveston agency.

T. A. Jennings has retired from the old company which he incorporated at Lynchburg, Va., in 1893 and Clyde Jennings has reorganized the company changing the name to T. A. Jennings Sons, Inc., making only a minor change in the original name. The company operates a three-story warehouse with capacity of 75 cars feed and flour and hay and an elevator capacity of 30,000 bushels.

A 30,000-bushel elevator is being erected at Tulia, Texas, for the Farmers Grain Company, replacing the one which burned. It will have two cleaners

and a feed mill driven by the engine of the old plant, and a new 10-horsepower motor will be installed in the cupola to drive the elevator leg which will have a capacity of 2,500 bushels per hour. The shipping will be handled through a 10-bushel automatic scale installed in the cupola with a well casing car spout.

Brennan & Co., on December 1 retired from active business at Savannah, Ga. Cavanaugh & Brennan, the predecessor of the retiring firm, organized to conduct a grain, fruit and produce business in 1885 and about 20 years ago were succeeded by Brennan & Co. Mr. Brennan retired when the firm was dissolved.

MINNESOTA AND WISCONSIN

The Eagle Roller Mill Company has bought the Bingham Bros.' elevator at New Ulm, Minn.

Repairs are being made to the Tracy, Minn., elevator of the Farmers Elevator Company.

A reinforced grain tank is to be built for the Interior Malt & Grain Company of Minneapolis, Minn. at a cost of \$21,000.

The grain elevator and feed mill of F. L. Furney at Ogilvie, Minn., have been sold to H. G. Bildsten of Minneapolis who has taken possession.

R. H. Sietseman, who was formerly manager of the Farmers Elevator at Reading, Minn., is now manager of the E. A. Brown Elevator Company at Trosky, Minn.

The grain storage at La Crosse, Wis., formerly the Listman Mill Company's property has been leased, it is said, by the Cargill Elevator Company of Minneapolis.

John J. Hagen & Son have built an addition to the elevator of the Columbia Elevator Company's house at Appleton, Minn., which they bought after their own house burned. A motor has been installed and a truck dump. They expect to put in a new and larger leg next spring.

E. E. Beckley of Minneapolis, Minn., has bought the old Independent Elevator at Farmington, Minn., owned by D. O. Smith. He will begin at once to purchase machinery and remodel the structure into an attrition mill for custom feed grinding.

The concrete storage tanks, formerly a part of Elevator "E" at Milwaukee, Wis., have been leased by the Grain Marketing Company, Milwaukee division. Blower equipment for unloading and loading the tanks will be installed. The tanks have a capacity of 650,000 bushels.

Farmers and business men around Hampton,

Minn., are buying stock in the new Farmers Elevator Company which is expected to take over the grain and feed business there. The Hampton Elevator has been closed down for some time. Herman Swanson will be manager.

CANADA

A branch office has been opened at Regina, Sask., by the Dwyer Elevator Company with P. M. McLachlin in charge.

The Gillespie Grain Company has leased its 10 terminal elevators at Fort William to the Inter-Provincial Selling Agency.

The Saskatchewan Co-operative Elevator Company, Ltd., has awarded the contract for the building of a new elevator at Orkney, Sask.

A new 1,000,000-bushel elevator is to be built shortly at Halifax, and plans have been completed and tenders will be called for. Hon. T. A. Low is Minister of Trade and Commerce.

Tenders are being asked for the erection of a 1,250,000-bushel elevator at Prince Rupert, B. C., by the Canadian Government through C. D. Howe & Co., consulting engineers located at Port Arthur, Ont.

D. E. Gillis has commenced as superintendent of the 2,000,000-bushel Government Elevator at Toronto. Mr. Gillis was formerly foreman of the Federal Government storage elevator at Moose Jaw, Sask.

D. R. Lamont of Regina, Sask., who has been engaged in the grain and milling business for 26 years, has been appointed manager of the Saskatoon office of the Saskatchewan Co-operative Elevator Company.

The construction part of the Spiller Elevator at Vancouver, B. C., has been completed in record time, the 38 grain bins, 26 feet in diameter and 90 feet high having been completed in 45 days. The machinery is now being installed and it is expected that the taking in of grain will start during December. It will have a storage capacity of 2,200,000 bushels.

F. Stork, M. P., has received advices from Hon. Thos. Law, Minister of Trade and Commerce, stating that instructions have been given to C. D. Howe, consulting engineer of Port Arthur, Ont., to proceed with the plans for the new elevator at Prince Rupert, B. C., in consultation with the Canadian National Railways chief engineer. As soon as they are complete tenders are to be called for the construction of the building, the foundation work of which is to proceed during the coming winter.

FIRES-CASUALTIES

Leal, N. D.—Fire destroyed the elevator here with 12,000 bushels of grain.

Wakefield, Neb.—Fire destroyed with a loss of \$15,000, the Crowell Elevator.

Estancia, N. M.—Fire destroyed the warehouse of the Trinidad Grain & Elevator Company.

Riverton, Kan.—The elevator of the Brand Dunwoody Company was on November 17 destroyed by fire.

Helena, Ark.—Fire destroyed with a loss of \$20,000, the grain bins of the Ellis-Gimmel-Love Mill Company.

Norborn, Mo.—A small loss occurred in the elevator of the B. V. Seward Grain Company on November 8.

Port Colborne, Ont.—Fire destroyed the wheat elevator of the Maple Leaf Milling Company with a loss of \$25,000.

Paris, Ill.—Fire damaged the building here, occupied by the J. B. O'Hara Feed Store, causing loss of about \$12,000.

Hodgenville, Ky.—Fire on November 8 destroyed the feed house of R. B. Hayer together with several other buildings.

Bruce, S. D.—A defective flue in the elevator of the Farmers Co-operative Company was the cause of a small loss recently.

Crawford, Tex.—Fire destroyed the grain elevator and flour mill of M. Marks with a loss of \$20,000, the insurance was \$10,000.

Wibaux, Mont.—The gasoline storage house at plant number two of the Occident Elevator Company was destroyed by fire recently.

Fort Worth, Tex.—The warehouse of the Fort Worth Belt Hay & Storage Company was damaged by fire with a loss of \$14,000. The cause of the fire is unknown.

Melina, near La Junta, Colo.—The Alfalfa mill built in 1917 by a stock company of business men and farmers burned with the mill and contents.

The warehouse was saved. The loss amounted to \$60,000; there was only a small amount of insurance on the property.

Fife, Mont.—The elevator of the Farmers Elevator Company was destroyed by fire on December 1 as the result of an overheated stove.

Juda, Wis.—The elevator owned by Ben Roderick burned with a loss of \$20,000; the insurance was \$15,000. A new elevator will be built.

Clandebye, Ont.—The grain elevator of W. Skinner was recently damaged to the extent of \$20,000. The loss is partly covered by insurance.

Redwood City, Calif.—Fire did \$10,000 damage to the feed establishment of J. B. Perry. Four carloads of grain had recently been unloaded.

Leslie, Iowa.—Fire destroyed the Curen's Grain Elevator Company. The fire was started by sparks from a locomotive. The plant will be rebuilt.

Holdfast, Sask.—Fire destroyed the elevator of the Province Grain Company and 3,500 bushels grain was destroyed with a total loss of \$12,000.

Centralia, Kan.—Locomotive sparks are said to have caused the fire which did serious damage to the elevator of C. E. Drumm on December 3.

Bushyhead, Okla.—The Major Elevator of the Nelson Grain Company was destroyed by fire on December 3. The cause of the fire was unknown.

Brooks, Minn.—Fire destroyed the elevator of the C. B. Hall Grain Company and contents, about 8,500 bushels grain. The loss of \$20,000 was covered by insurance. The Farmers Elevator Company also sustained a small loss by fire.

Port Huron, Mich.—Fire destroyed the Grand Trunk Elevator together with 600,000 bushels of grain. Early estimates of the loss were \$500,000 including \$100,000 damage done to the barge *Alexander Maitland* and its cargo of barley.

Montreal, Que.—Fire destroyed the Elevator B, one of the new Dominion Elevators, at Montreal and resulted in the death of five men. The ele-

vator had a capacity of 5,000,000 bushels and was filled to capacity. The fire followed the dust explosion.

Columbia, S. D.—Fire destroyed the Farmers Elevator Company's elevator and the Geisler, Atlas and Farmers Equity Elevators at Columbia on November 9.

Nokomis, Ill.—Fire on November 15 destroyed the elevator of the Nokomis Farmers Co-operative Grain Elevator Company. The fire was due to hot bearings.

Worthington, Minn.—Fire destroyed the St. John's Elevator Company's plant with a loss of \$40,000, and flour, wheat and seed worth \$10,000. It is partly insured.

Marietta, Kan.—Fire on November 24 damaged

the elevator of the Marietta Stock & Grain Company, to the extent of \$16,000. Considerable grain was also destroyed.

Drayton, N. D.—Fire on November 12 destroyed the elevator belonging to the Farmers Interstate Elevator Company. About 20,000 bushels of grain, mostly flaxseed, also burned.

Sandusky, Ohio.—Fire destroyed the old grain elevator owned by John E. Stang. The loss amounted to \$5,000. It is partly covered by insurance. The origin of the fire is unknown.

Dunkirk, N. Y.—Fire damaged the feed and flour warehouse of the Kedrous Company with a loss of \$25,000 on November 17. The fire spread to these buildings from an adjacent one. The damages were repaired immediately.

OBITUARY

ADAMS.—After an illness of two years, Charles C. Adams of the Chas. C. Adams Seed Company, China Grove, N. C., died on November 6. The business will be conducted by his wife.

ALDRICH.—Duane Aldrich, manager of the Montana elevator at Suffolk, Mont., was killed while unloading a car of flour.

BEADLE.—O. B. Beadle died recently at St. Petersburg, Fla. He was formerly in the feed and flour business at Anderson, Ind.

BEAVER.—Lewis H. Beaver of Norwood, Mass., head of the Beaver Coal & Grain Company, died at Boston, Mass., aged 63 years.

BOLTON.—Hinckley G. Bolton, special sales representative for the American Milling Company of Peoria, Ill., died on October 25 at a hospital in Memphis, Tenn., from injuries received when he was struck by an automobile.

BRIDGES.—H. E. Bridges died on November 12 at Los Angeles, Calif. He was a member of the Los Angeles Grain Exchange and had been engaged in the handling of grain, cottonseed, and oil products. He is survived by his widow and two children.

BRUMBAUGH.—Oliver Brumbaugh, a wealthy retired grain and feed merchant of Louisville, Ohio, committed suicide on November 10.

CHALCRAFT.—Mathew J. Chalcraft was killed when hit by a railroad train. He was manager of the Empire Elevator at Bath, S. D.

COOK.—William S. Cook, a grain merchant of Stouffville, Ont., died from carbon monoxide poisoning on November 29. He is survived by his widow and one daughter.

DEMPSEY.—James Dempsey, one of the oldest as well as one of the largest buyers of hay in New York State, died on November 9 following a long illness, at his home in Frankfort, N. Y. His firm, the James Dempsey Hay Company, was well known. His widow and two daughters survive him.

DAY.—John Day, a retired grain merchant, died at Creemore, Ont., aged 72 years. In his younger days he was well known in the Ontario milling and grain business.

GILLILAND.—Llew Gilliland of Van Wert, Ohio, died on November 17 aged 53 years. He was formerly engaged in the grain business with the Gilliland Grain Elevator at Van Wert, but more recently was head of the Van Wert Bale Tie Company. He had been a member of the National Hay Association for years.

HEIGLE.—Lawrence Heigle died on November 21 at Versailles, Ohio, from pneumonia. He was a grain dealer there, and junior member of Heigle & Son. He was 29 years old.

HOPPIN.—Richard Hoppin, for 40 years in the employ of the Allis-Chalmers Manufacturing Company, died at Minneapolis, Minn., on November 21. He had been in Minneapolis for the past year representing the company. Mr. Hoppin was 69 years old.

HORN.—Fred J. Horn, one of the proprietors of the Hempstead Seed Company of Hempstead, N. Y., was accidentally killed on November 17 while out hunting.

KINSLER.—A. V. Kinsler, a grain man of Omaha, Neb., died recently.

KRUCK.—Henry Kruck, manager of the Kellogg Elevator at Ortonville, Minn., fell into the bin of the elevator and was killed. He was 67 years old. His two daughters survive him.

LAKE.—W. H. Lake of Picton, Ont., died during the first week of November. He was 82 years old and had been in the flour and feed business there for years.

LAWS.—John Laws died, aged 94 years. He was

a pioneer feed and flour man of Crown Point, Ind. Four children survive him.

MOEHLMAN.—Henry Moehlman died after a long illness on November 26. He was a member of the firm of Moehlman Grain & Produce Company, Madison, Wis., and was 60 years old.

MOYER.—Lewis Moyer, senior member of Moyer Bros., wholesale feed and flour company of St. Catharines, Ont., died, aged 61 years. His widow survives him.

MURPHY.—M. F. Murphy, president of the Murphy-Grier Grain Company of Springfield, Ill., died recently at the Mayo Bros. Hospital at Rochester,

FIELD SEEDS

NEW ANALYST IN CALIFORNIA

Kathleen Bland, formerly in the Seed Laboratory, United States Department of Agriculture, Washington, D. C., has accepted a position in the Seed Laboratory, State Department of Agriculture, Sacramento, Calif. Mrs. Gilbert Rice who was seed analyst in charge of the Branch Seed Laboratory in Berkeley for some years, has been secured to assist in the Seed Laboratory at Sacramento during the rush season of the fall and winter.

COMMERCIAL SEED ANALYSTS TO MEET

The Commercial Seed Analysts' Association will hold its meeting at Washington, D. C., from December 31 to January 2. The Association of Official Seed Analysts meets at the same time and there will be several joint meetings. The program for the Association of Official Seed Analysts is given elsewhere.

EX-SERVICE MEN AS SEED ANALYSTS

Of the 1,600 disabled ex-service men sent to the Iowa State College of Ames, a small group selected the work in seed analysis. These men were given a comprehensive training in business English, business mathematics, soils, accounting, farm crops, botany, etc. A large part of the time was spent by these ex-soldiers in seed labs assisting the regular analyst. The regular licensed analyst kept close supervision over them.

The class has been very successful and every member of it has been placed.

OFFICIAL SEED ANALYSTS HOLD MEETING

The meeting of the Association of Official Seed Analysts of North America this year on December 31 and January 1 and 2 at Washington, D. C., will be unusually attractive because at it will be given the reports of the International Seed Testing Congress held last summer in England. The program for the three days' meeting includes a number of other interesting items and several good speakers including Edgar Brown, U. S. D. A.; Mrs. Salome Comstock Miller of Pennsylvania; Dr. H. L. Bolley of North Dakota; Helen H. Henry, U. S. D. A.; Prof. O. Stevens of North Dakota and Prof. W. O. Whitcomb of Montana. The subjects which will be handled by these and which promise to be of particular interest are: "Agricultural Seeds—When and Where to Buy," "Comparative Studies of Alfalfa Seeds of Different Shapes," "Test Nurseries for Disease and Variety Control—An Aid to Seed Standardization and Certification," "Color and Weight of

Minn. He was a member of the Chicago Board of Trade, St. Louis Merchants Exchange, and Peoria Board of Trade.

PENMAN.—John Penman of the Penman Bros., dealers in feed and grain, of Brazil, Ind., was killed recently together with three others when the car in which they were riding was struck by a train.

RICE.—Henry H. Rice, formerly in the grain commission business at Chicago, died recently aged 84 years at Sioux City, Iowa.

ROHM.—J. H. Colvin Rohm, senior member of the Rohm Bros., grain dealers and millers, died at Rockville, Ind., recently.

SHELDON.—Walter D. Sheldon killed himself on November 28 at his home near Los Gates, Calif. He was a wealthy retired grain broker of San Francisco, Calif., and was a member of the Merchants Exchange. He retired from the grain brokerage business about a year ago.

SHEPARD.—Thomas Shepard, a member of the feed and flour trade at Central Square, N. Y., died aged 82 years.

SMITH.—O. G. Smith died recently at his home in Chadron, Neb. He was at one time president of the Nebraska Farmers Grain & Livestock Association and was well known in the farmers' elevator movement.

STEADMAN.—George E. Steadman died recently, aged 50 years. He was assistant superintendent of the Burrus Mill & Elevator Company of Fort Worth, Texas.

TINGTMAN.—A. L. Tingman died recently, aged 72 years. He was a grain dealer for years at Diller, Neb.

WEARE.—Charles Ashley Weare, for years prominent on the Chicago Board of Trade, died on December 8, at Boston, Mass., where he had lived since his retirement 12 years ago.

Red Clover Seed as Indicating Origin," "Variations in Analyses of Orchard Grass Seed—Referee's Sample," "Germination of Hard Seeds of Legumes as the Season Advances," "Interpretation of the Seed Value of Newly Threshed Wheat."

In the afternoon of the second session, a visit will be made to the Federal Seed Testing Laboratory and there will be demonstrations of various phases of seed testing work.

The Friday sessions will be executive and will include roundtables for members at which topics of vital interest to analysts will be discussed and special studies by the Research Committee on variations in seed testing will be presented.

SEALING TO PROTECT BUYERS

Montana has two methods of sealing to protect buyers of Alfalfa seed. The system of sealing inaugurated by the Department of Agriculture to protect the name and reputation of Montana grown seed, no guarantee as to quality being implied. This plan protects seedsmen who are handling genuine Montana grown seed from the competition of unscrupulous salesmen who offer seed grown elsewhere as a Montana product. In the other method, only pedigreed hardy Alfalfa of the Grimm and Cossack varieties is sealed. This work is done under the direction of the Montana Seed Growers' Association co-operating with the Montana State College.

SEED SERVICE PLANS

On November 28, representatives of co-operative seed departments of state farm bureaus and allied groups of Federated Seed Service met in Chicago, Ill.

The Federated Seed Service is incorporated under the non-profit corporation act of Michigan, its purpose being to insure the distribution of seeds of known origin, variety and quality, to its members; to exercise and maintain by inspection and other supervisory and regulatory powers, the quality of seed distributed; to encourage and promote the use of seeds of known origin, quality and adaptation.

In addition to the seed stocks handled by individual state seed departments, arrangements have been made with J. W. Nicolson of Safeseed, Inc., to provide additional large supplies of northwestern grown Alfalfa seed and native grown adapted Clover seed. Mr. Nicolson is nationally known as a pioneer in the co-operative distribution of dependable seed of known origin. Until recently he served as manager of the seed department of the Michigan State Farm Bureau. All Federated Seed Service, Safeseed, will be distributed in sealed bags, certified as to origin and quality.

Prof. J. F. Cox of the Farm Crops Department

of the Michigan Agricultural College, has been granted temporary leave of absence by the Michigan State Board of Agriculture to serve as executive secretary of the Federated Seed Service from January 1 to May 1.

L. E. Shuttleworth was elected president; Harry G. Beale, vice-president, and C. F. Barnum, secretary-treasurer.

IMPORTS OF FORAGE PLANT SEEDS

The Seed Laboratory of the Bureau of Plant Industry reports the following imports of forage plant seeds permitted entry into the United States under the Seed Importation Act:

Kind of seed	November		July 1, '24 to Nov. 30, '23	
	1924	1923	Nov. 30, '24 to Nov. 30, '23	Nov. 30, '23
Alfalfa.....(1)	629,100	2,377,000	3,629,300	5,864,500
Canada bluegrass.....	203,600	129,300	255,500	197,900
Alsike Clover.....	1,357,400	1,321,300	3,441,300	6,182,400
Crimson clover.....(2)	214,000	76,300	3,269,500	5,505,700
Red clover.....	34,800	792,800	274,500	841,800
White clover.....	76,800	230,400	364,000	522,000
Clover mixtures.....	1,400	4,400	8,500	22,700
Meadow fescue.....			500	100
Grass mixtures.....			100	100
Broom-corn millet.....	11,000	162,000	53,100	311,500
Orchard grass.....(3)	443,200	148,600	759,300	477,200
Rape.....(4)	417,600	1,365,800	1,449,200	3,475,900
Redtop.....	500		500	
English ryegrass.....	22,400	287,800	426,200	636,400
Italian ryegrass.....	107,200	116,400	476,900	435,200
Timothy.....			100	
Hairy vetch.....	43,600	404,900	797,600	907,100
Spring vetch.....		77,100	556,800	521,800

The Seed Laboratory of the Bureau of Plant Industry reports the following imports of forage plant seeds not subject to the Seed Importation Act:

Bentgrass.....	15,200	38,800	76,300	70,900
Biennial white-flowered sweet clover.....	787,000	638,300	812,100	924,100
Biennial yellow-flowered sweet clover.....		58,500	11,000	58,500
Bur clover.....	4,600		4,600	
Crested dog's tail.....	5,100	12,400	14,000	19,100
Chewings fescue.....	30,000	198,100	501,000	727,500
Other fescues.....	82,100	119,900	350,400	277,600
Rescue grass.....				1,500
Rhodes grass.....		1,500	2,300	7,700
Rough-stalked meadow grass.....	1,100	4,500	3,200	7,800
Serradella.....			200	
Sweet vernal grass.....	400	100	500	400
Tall paspalum.....			4,500	4,400
Velvet grass.....				19,400
Wood meadow grass.....	3,800	5,500	4,900	5,500
Yarrow.....				500

(1) All from Canada except 65,300 pounds from Argentina and 28,000 pounds from Germany.

(2) All from France except 39,200 pounds from Germany.

(3) All from Denmark.

(4) All from Holland except 39,600 pounds from Danzig and 22,000 pounds from Germany.

THE CANADIAN SEED GROWERS ASSOCIATION

P. Stewart, president of the Canadian Seed Growers Association of Ottawa, recently issued the following statement concerning his organization:

"The Canadian Seed Growers' Association is a national organization of farmers who specialize in the production of registered and Extra No. 1 seed. They multiply for commerce the foundation stock seeds called 'Elite Stock Seed' produced by Dominion and Provincial Experimental Stations and sometimes by private growers. The association office functions as a registration bureau for seeds; maintains systematic records of their history, pedigree, disposal and performance; directs the work of the growers, and acts as a connecting medium between the growers and Dominion crop and seed inspection services; publishes a crop catalogue, and serves as a clearing office for marketing. Registered and Extra No. 1 seed provides much of the seed stocks for field crop competitions, local seed fairs and provincial seed exhibitions.

The association reports the following acreages and yields of seed eligible for registration and available for market from the 1924 crop.

	Acreage	Estimated Yield
Wheat.....	17,289	355,445 bus.
Oats.....	11,014	481,870 bus.
Barley.....	458	14,829 bus.
Flax.....	941	9,155 bus.
Alfalfa.....	3,192	350,000 lbs.

Considerable registered seed is available of such crops as corn, peas, Sweet Clover and potatoes.

CANADIAN SEED ACT REVISED

In the revised Canadian Seed Acts, of October, 1924, a clause has been added giving the American exporter of seeds to Canada the right of delivery without examination or bond when the shipment is accompanied by a certificate from any of the following laboratories:

California—State Department of Agriculture, Sacramento; Colorado—Agricultural Experiment Station, Ft. Collins; Delaware—Dover State Board of Agriculture, Dover; Idaho—State Department of Agriculture, Boise; Indiana—Agricultural Experiment Station, Lafayette; Kentucky—Agricultural Experiment Station, Lexington; Maryland—Agricultural Experiment Station, College Park; Minnesota—University Farm Experiment Station, St. Paul; Missouri—Agricultural Experiment Station, Colum-

bia; New Jersey—Agricultural Experiment Station, New Brunswick; North Carolina—Department of Agriculture, Raleigh; North Dakota—Agricultural Experiment Station, Agricultural College; Ohio—Department of Agriculture, Columbus; Oregon—Agricultural Experiment Station, Corvallis; Pennsylvania—Department of Agriculture, Harrisburg; Texas—State Board of Agriculture, Austin; Virginia—Department of Agriculture, Richmond; Washington—Department of Agriculture.

AN EASTERN SEED LABORATORY

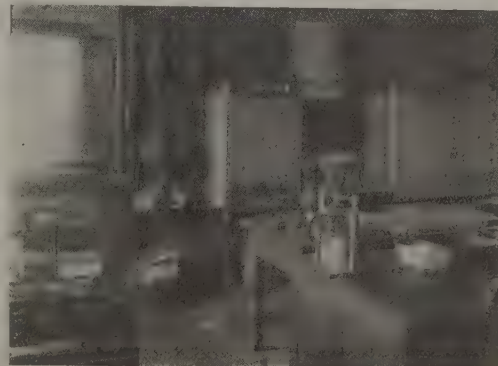
With the slogan "Seeds of known origin and variety, pure enough and viable enough for the very best planting purposes, and sold in manner satisfactory to the purchaser," the seed testing laboratory of the New York State Agricultural Experiment Station at Geneva, N. Y., under the direction of M. T. Munn and Elizabeth F. Hopkins, is doing much to help the farmers of that state better their crops and by so doing improve their general condition.

The seed testing department of the New York State Department of Agriculture was brought into greater prominence when the new and more stringent seed law was passed in that state in 1920.



THE NEW YORK SEED LABORATORY

The revision of the old law brought about a material change in the farmer's attitude towards seed matters and he now takes a keen interest in seed testing. The 1920 law is patterned after the "Uniform State Seed Law." From 1918 until 1923, 5,451 samples of seed were submitted to the laboratory for either purity analysis or for germination test, or both, making a grand total of 10,215 tests. Seed samples are tested free of charge for residents of the state when the seed is grown by the sender and when it is to be used for their own planting purposes. A fee is charged for all tests the results



SOME SEED TESTING APPARATUS

of which are to be used for declarations of sale or for labeling purposes, as provided by the seed law.

The procedure followed here in the testing of seeds is similar to that in use at other seed testing stations: The individual sample of seed is mixed thoroughly and a representative sample secured for the actual detailed work of testing. The sample after being weighed is separated into four groups: Pure seed; other crop seeds; inert matter and weed seeds.

The four separations are weighed and the percentage by weight computed. The pure seeds are tested for viability.

The New York laboratory stresses the value of seed testing to the farmer as a buyer in that through the seed testing he can find out whether it is true to name; the origin of the seed; its purity; its viability and whether it is free from fungous diseases. As a seller, the farmer finds value in seed testing in that it enables him to sell his seed stocks intelligently and on a quality basis.

New York farmers are warned by the laboratory to beware of the particularly "cheap" and "wonderful" sales in seeds. Samples of bargain counter seeds have been tested and in one particular case it tested only 88 per cent pure seed with nearly 6

per cent inert matter or dirt and other trash and over 5 per cent weed seeds. There were 91 different species of weed seeds in the three gram sample.

The "Rules for Seed Testing" recommended by the Official Analysts Association, may be obtained in printed form from the New York Experiment Station, by merely asking for Circular No. 73.

The New York seed law is strictly a labeling or tagging law and provides that the seed must be sold for approximately what it is and that it must be rather completely and truthfully labeled. Altogether the results so far from the new seed law have been entirely satisfactory and the benefits which will accrue to the farmer in years to come will, in the opinion of the seed laboratory, be great.

SEED TRADE IN NEW YORK REMAINS OF RESTRICTED VOLUME

By C. K. TRAFTON

There has been no noteworthy change in the local seeds market during the month under review. This was especially true of the leading varieties of field seeds, in which jobbing trade was virtually at an end. In certain varieties, export business was still of fairly good volume, but domestic business was restricted almost entirely to a few specialties, notably the items of interest to manufacturers of feeds for live stock and poultry.

Red Clover has furnished a striking example of firmness in the face of a poor demand. The spot basis for the imported variety has advanced to 31@32 cents f. o. b. New York, compared with 28@30 cents a month ago. This advance is especially noteworthy in view of the much larger arrivals from Europe and Chile; totalling about 2,600 bags, compared with only 580 during October. Apparently this seed is being held here on consignment or else is held by strong interests who expect a better market later on, as according to general report, demand in this territory has thus far been slow. Seemingly, buyers have ignored the numerous gloomy crop reports from our own growing sections as well as from virtually all European countries and also the reports that interior dealers have actually made sales for shipment to Europe. At any rate, they have evidently adhered to the belief that when the usual planting does develop they will be able to buy on a more advantageous basis. Advices from foreign markets have remained consistently strong. Early in the month small quantities were secured in France at 26 cents c. i. f. N. Y., but later the French market was reported as active and advancing and only small lots were offered at 27½ cents c. i. f. Likewise, German seed was bought in a small way early in the month at 28 cents c. i. f., but later offers ranged from 28½ cents to 32 cents. Shippers stated that the new crop, plus the old crop carry-over would be just sufficient to cover European requirements and that the development of a noteworthy demand from this side would cause a material advance in prices. Small offers were also reported from the U. K. and from New Zealand at 31 cents c. i. f. Because of the strong European situation, interest continued active in Chilean Clover. At the outset business was possible in a small way at 26 cents c. i. f. Later shippers asserted that because of continued active buying for British account supplies of choice seed had been practically exhausted. Hence, after additional small sales at 28 cents c. i. f., they advanced the basis to 30 cents. British houses offered their Chilean seed for shipment to this market at 31 cents c. i. f. At this writing some increase is noted in the offers from Europe, but prices are still too high to interest buyers, viz: French 26.50 @30.90 cents, German 28@32 cents, British 31 cents, Italian 25 cents.

Crimson Clover has been dull but firm on spot at 7@7½ cents. Small offers are reported for prompt shipment at 5½ cents c. i. f. and it might be possible to interest speculative buyers at about a half-cent less. There were no arrivals during the month, compared with 600 in October.

White Clover has been less active on spot, but the basis is unchanged at 48@50 cents. Arrivals were only 220 bags, against about 800 in October. Early in the month a few small lots were secured from German shippers at 43 cents c. i. f. Temporarily offerings became extremely meager, shippers reporting that the bulk of the early supply had been sold to the United Kingdom where the crop was virtually a failure. Later the offerings again became larger and German seed of good quality was available at 40@41 cents c. i. f. Buyers, however, were not interested.

Alfalfa has remained lifeless, but nominally unchanged on a basis of 20@21 cents for domestic and 17@18 cents for imported. Because of good crop reports buyers have been holding off in expectation of a decline. On the other hand, there has been no pressure to sell, partly because of the impossibility of securing foreign seed on anything like a reasonable basis. European markets were firmer, partly in sympathy with Red Clover and partly because of poor crops. Argentine shippers were not offering early in the month, naming merely nominal quotations of 17 to 18½ cents c.

i. f. Later small lots were firmly offered at 20 cents c. i. f. At the same time South African seed was offered at 18 cents c. i. f. There were no arrivals of foreign seed; and only 150 bags during October.

Timothy was in good demand for export early in the month and the spot basis remained firm 7@7½ cents. Later foreign buying was less active, and although quotations were not changed the tone was said to be slightly easier. The total volume of export business for November was described as decidedly good. The shipments amounted to about 14,000 bags, of which nearly half went to Germany. Denmark got over 3,200, Great Britain 2,800, and France over 1,500. The total for October was close to 17,200 bags.

Fairly large export dealings were reported early in the month in Bluegrass and Meadow Fescue. The export movement included 580 bags of Bluegrass, 1,280 bags of Meadow Fescue, and 300 bags of Redtop.

Rye Grass has been quiet on spot, but holders remained firm at 10@10½ cents as it was practically impossible to buy in the United Kingdom and the month's arrivals included only 410 bags from that source and 350 bags from Argentina. This compared with last month's total of 1,430 bags. Owing to bad growing conditions shippers in the United Kingdom reported that choice seed was scarce and offered sparingly on a basis of 10 cents c. i. f. for Italian and 10¼ cents c. i. f. for Perennial. Argentine shippers reported that it was difficult to secure worth-while quantities that could pass inspection here. Hence only small lots were offered at 6¼@7 cents c. i. f. Although buyers were generally limited at 6½ cents, some business was done at 6¾ cents.

Orchard Grass has declined about one cent, being now quoted on spot here at 16½@17½ cents. Still, the arrivals from Denmark amounted to only 1,080 bags, compared with 3,980 during October.

Sweet Clover has been dull and slightly easier, the spot quotation being 14@15 cents.

ALFALFA AND SWEET CLOVER

The relative merits of Alfalfa and Sweet Clover as a pasture and the costs of raising both have been the subjects of recent investigations by the Minnesota Agricultural College.

It found, in southwestern Minnesota where experiments were made, that Alfalfa hay cost \$5.70 a ton and Clover and Timothy, \$8.36. The average yield of Alfalfa was 2.2 tons, and Clover and Timothy, 1.1 tons. Sweet Clover was the most productive pasture crop for that region.

Grimm Alfalfa is being used in increasing quantities and the cost records show Alfalfa to be both cheapest hay to produce per ton and also most valuable for feed.

SEED ANALYSIS

Have you produced more Clover or grass seed than you need? Has it been recleaned since it was hulled? Every producer should reclean seed to take out both noxious and common weed seeds and inert matter, and thus have a better quality for seeding purposes.

The State Seed Laboratory of the Department of Agriculture at Springfield, Ill. is maintained by the state to furnish information regarding the quality of Clovers and grass seed. Samples represent-

ing the recleaned seed should be sent to the Seed Laboratory as soon as possible after the recleaning to get an analysis report showing what percentages of weed seeds and inert matter they contain, also how the seed which they represent should be tagged to comply with the Illinois Seed Law.

If you wish to sell Clover or grass seed to your neighbors it is necessary to have an analysis tag on it. The information is furnished free on five samples each year by Albert C. Wilson, Chief Seed Analyst of the State Department of Agriculture.

If you have seed for analysis do not send it to the University of Illinois, but to the Seed Laboratory at Springfield, where analyses of seed are made. The amount required is two ounces and the name and address of sender should be on the package or inside with the seed.

On account of the light crop of Clover, especially Red Clover, all available seed should be thoroughly recleaned before being sent in for analysis. Don't wait until spring to have seed analyzed. Do it now.—Albert C. Wilson, Chief Seed Analyst, Springfield, Ill.

WESTERN SEEDSMEN MEET

By B. S. BROWN

The Western Seedsmen's Association held its semi-annual meeting in Kansas City, Mo., November 29, with a good attendance, and lively interest. The morning session was devoted to discussion of field seed matters, and the afternoon to garden seeds. The chief action by the association was unanimous adoption of a resolution favoring a 10 cent price as minimum on small packages of vegetable seeds. The association also voted in favor of a comparatively higher price on seed sold in broken lots over the seed sold in straight bag lots. Action was taken unfavorable to the guaranteeing of any price on seeds for future delivery.

In his opening remarks, President Mangelsdorf said that the meeting was the twenty-fifth anniversary of the Association.

INOCULATING SEED

The Georgia Experiment Station recently issued a bulletin on inoculating seeds, a practice rapidly growing in popularity, from which we quote the following paragraphs:

It seems rather a bizarre idea to suggest to a farmer that he grow a crop of bacteria. Yet a crop of nitrogen-fixing bacteria is one of the most profitable crops a farmer can grow. Probably one of the greatest and most expensive difficulties encountered in starting to grow legumes in Georgia is to get the soil inoculated with the proper kind of bacteria. Often a farmer becomes enthusiastic over some legume and buys a large quantity of seed at a big expense and makes a failure of the crop because the soil was not properly inoculated. It is better to start out in a more conservative way and inoculate the soil thoroughly with the proper bacteria. By looking ahead a year or two a farmer can have all the bacteria needed to inoculate any kind of legume.

There are a number of different groups of legumes in which the bacteria from any one plant will inoculate all the plants in the group:

Group 1. Red clover, Alsike Clover, Crimson Clover, White Clover, Ladine Clover, low hop Clover, rabbits-foot Clover. Group 2. Alfalfa, Bur Clover, black medic or yellow trefoil, White Sweet Clover,

Yellow Sweet Clover, Yellow Annual Sweet Clover, Huban Clover. Group 3. Cowpeas, peanuts, Japan Clover, velvet bean, beggarweed, kudzu, lima bean, mung bean. Group 4. Garden and field pea (or English pea), vetch (hairy, spring, Augusta, wild, etc.), Broad bean, lentil, sweet pea. Group 5. Soybean. Group 6. Garden or field bean, scarlet runner bean. Group 7. Lupines, serradella. Group 8. Hop peanut. Group 9. Lead plant. Group 10. Trailing wild bean. Group 11. Locust tree.

Under Georgia conditions it is never necessary except under very unusual conditions to inoculate the soil for plants in group 3. Bacteria from this group appears to be in all our agricultural soils. Groups 6, 7, 8, 9, 10 and 11, do not include plants grown as farm crops in Georgia. This leaves the bacteria from groups 1, 2, 4 and 5, which are important to Georgia farmers. In all these groups are valuable legumes.—R. P. Bledsoe, Agronomist, Georgia Experiment Station.

SEEDS ACTIVE AT MILWAUKEE

By C. O. SKINROOD

The seed market continues to rule very strong. Some dealers report that the seed market is gradually feeling the bullish market trend in all the grains. However, they declare that back of the strong seed situation and the steadily rising prices, is the small supply of Clover seed which is available this year. Most of the dealers declare that not only is the seed market not top heavy—prices are not too high—but still further advances are likely to take place.

The campaign in Wisconsin to put more Alfalfa on every farm in the state is going on with unabated vigor, according to L. F. Graber, the Alfalfa specialist at the College of Agriculture at the University of Wisconsin. Mr. Graber reports that the subject of Alfalfa will be stressed not only at the farm institutes this winter, but it will be pushed at other meetings of farmers, in fact, wherever the subject can be taken up to good advantage.

Prof. R. A. Moore, pure bred seed specialist, at the Wisconsin College of Agriculture is sponsoring a movement among Wisconsin farmers to use more of the common White Blossom Sweet Clover for pasture. He declared that although experiments are still being conducted on Sweet Clover, it is still best to stick to the white blossomed variety until these experiments are finished.

The Blue Valley Creamery Institute has issued a statement in Milwaukee showing that the conditions in seed trade in Wisconsin are almost that of a famine with a Clover seed production of only 81,000 bushels, or about 51 per cent of the total crop of 184,000 bushels for last year and comparing also with the 267,000 bushel output for the state in 1922. The comparison shows that Wisconsin will have only one third of the seed supply of 1922.

The statement also adds that the national crop of Clover is only about half of the five-year average so that it is a certainty that seed will be scarce. The point is suggested that Europe supplied America with 24,000,000 pounds of Clover seed last year, while this year seed is scarce in Europe and there probably will be little seed available for shipment to the United States.

The farm statistician of Wisconsin, Paul Nykus, connected with the Wisconsin Department of Agriculture says that in all probability Wisconsin will have to bring in Clover seed to supply the demand because of the very light crop. With only about 80,000 bushels to use, he says it looks very much as though the state will have none to sell outsiders, but on the other hand may have to bring in seeds in liberal amounts. Not only was the acreage small, he adds, but the yield was actually only about one bushel to the acre.

Mr. Nykus points out that the seed corn situation in Wisconsin is not as bad as has been pictured by some who are not as familiar as they should be with the situation. There was very little corn fit for seed in the northern and eastern sections of the state, according to the report of Mr. Nykus, but in the rest of the state, especially the southern tier of counties, there was plenty of corn available which would make excellent seed. He points out that the surplus in the southern and the southwestern parts of the state should be enough to supply the entire state and thus prevent any shortage in the Wisconsin supply next spring.

Although only 20 per cent of the corn crop of Wisconsin was reported as merchantable, the month of October was exceptionally warm and dry and this helped to mature many corn fields in the southern part of the state, which made seed corn available if the farmers picked it. However, it is not certain that farmers collected much more than enough seed for their own supplies.

Wisconsin seed growers have been offered a chance to take part in the Federated Seed Service. It was considered and perfected at a conference of state farm bureau representatives of Wisconsin.

L. M. Wright, the secretary of the organization, says it is designed to assure distribution of seeds of known origin, variety and quality, to maintain inspection and supervision over the quality of seeds distributed and to encourage the use of known and reliable seeds. The organization is aiming mostly

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at "bootleg" seeds and should help the buyer of seeds to get what he pays for, according to Mr. Wright.

It is believed the service will enlist general support throughout Wisconsin as designed to take much of the guess work out of the seed market which exists at the present time. Wisconsin, as one of the big seed producers, is vitally interested in this movement.

The North American Seed Company says the chief change in the seed market at Milwaukee for the last 30 days is the advance of about \$2 in the price of Alfalfa to a new market price of \$22 to \$24.

The advance is said to be based largely on the fact that the Alfalfa supply and crop yield is not nearly as large as first expected. The first news of the Alfalfa yield was that of an abundant yield, but this is not being borne out by the amount of seed which is being offered, is the verdict of the North American company.

Another factor in the Alfalfa trade is the shifting of demand for seed over into this field by those who do not like the high prices prevailing for Red Clover and other lines. This is the usual trade experience of consumption always shifting over to the cheaper product, according to the North American officials.

The Red Clover seed receipts have not been large here, according to the North American company, although receipts, according to the Chamber of Commerce figures look like a big total. The receipts may be the purchases by contracts at some other time, it is believed.

The entire seed market is reported as very strong with the chances strongly tending to further advances. The situation is still further strengthened by the fact that very small imports of seeds are looked for this year due to a pronounced shortage of seeds in Europe.

Some of the Wisconsin owners of seeds are still refusing to let go in the belief that prices may work higher, says the North American company. This has tended to hold down the offerings to date. On the other hand the high prevailing prices have caused many farmers to let go of their supply.

The North American company anticipates an excellent demand for seeds for the entire season as farmers are believed in good financial condition and well able to buy. The company quotes Red Clover around \$30 and \$34 for the choice qualities. Timothy is given a range of \$6.50 to \$7.50. Sweet Clover is selling mostly from \$12 to \$14 and White Clover is quoted from \$35 to \$48.

The seed market is holding very strong with prices rather stable, according to the Courteen Seed Company. Alfalfa is the only exception and this has gone up about 2 cents a pound. Recently the yield of Alfalfa was not as large as first estimated, the Courteen company adds, and the market has firmed up considerably.

On the other hand the Timothy seed yield turned out even better than expected and this has caused a rather dull market with prices ruling easier—mostly from \$6.50 to \$6.75.

The Courteen company says the Sweet Clover market is rather active with good buying and prices mostly from \$10 to \$11. White Clover ranges mostly from \$40 to \$46.

An excellent demand is expected by the Courteen company for the Red Clover seed as the supply is only 70 cents of normal. No doubt there will be plenty of demand for this seed and a strong and active market is looked for. The supply of Red Clover has been coming in in good volume and most of the crop has been moved, it is believed.

Alsike is quoted by Courteen's mostly from \$17 to \$21.50. Red Clover is quoted from \$28 to \$32 as the price paid to farmers, and the selling price to the trade ranges from \$30 to \$33.

As for imports of seeds this year, these are expected to be of very small volume. Only a few sacks have come in and very small imports are looked for for the entire season as the price level in foreign markets is said to be even higher than the American range of prices.

In general the Courteen company looks for an excellent trade in seeds with a good demand all along the line.

INTERNATIONAL SEED TRADE RULES

The International Seed Trade Rules, approved by the Wholesale Grass Seed Dealers Association in November, are as follows:

Section 1—A sale or contract of sale of agricultural seeds may incorporate these International Seed Trade Rules ("I S T R") as terms and conditions of such sale or contract of sale, in so far as they are applicable to, and not in conflict with, the express terms and provisions of the sale or contract of sale, by including in such sale or contract of sale the code word "I S T R."

Quality and Description

Section 2—(a) Unless otherwise expressly provided in the sales or contract of sale, the container, either burlap or cotton, is without charge, and is to be weighed in as gross for net.

(b) In trading in kilos, a hundred kilos shall be 220.4 pounds; ten hundred kilos, or 2,204 pounds, shall constitute one ton.

An English hundred weight (cwt.) shall be 112 pounds; twenty hundred weight or 2,240 pounds shall constitute one ton.

An American or Canadian hundred weight shall be

100 pounds; twenty hundred weight or 2,000 pounds shall constitute one ton.

Unless otherwise expressly provided in the sale or contract of sale, the unit of measure of the country of the seller shall be adopted.

(c) When selling by description, the description must include percentages of Purity and Germination, the method of ascertaining such Purity and Germination being determined by these rules.

(d) All sales or contracts of sale of agricultural seeds shall be subject to the condition or warranty that such seeds shall pass the Seed Import Law of the country of the buyer.

(e) Sales on Sample: Delivery shall be equal to the sample in every respect; a sale or contract of sale based on "identical" sample requires that the sample shall be taken from the identical lot of seeds offered for sale.

(f) Contents of all the bags covering one unit of shipment shall be bulked and of uniform quality.

Terms of Payment

Section 3—Terms of payment shall be Three Days Sight Draft or Bill of Exchange, commercial documents (as defined by these rules) attached, payable on presentation to buyer unless time of payment is otherwise specified by the express terms of the sale or contract of sale. Seller shall pay all collection charges on drafts or Bills of Exchange, irrespective of the time of payment of same.

Payment of draft or Bill of Exchange by buyer shall not, in any manner, waive buyer's rights to recover for seller's failure to fulfill his obligations under the sale or contract of sale.

The term "Arrival Draft" shall mean that the draft or Bill of Exchange covering payment of the seeds shipped, and other charges, shall not be presented to the buyer for payment unless and until the seeds shall have arrived at point of destination and the buyer shall have had a reasonable opportunity given him to inspect and test the seeds contained in such shipment.

Shipment

Section 4—(a) Shipment shall be defined and be construed viz.: That the seeds sold shall be on board the steamship which is to convey to the port of discharge without trans-shipment or without deviation between the port of shipment and port of discharge, unless circumstances arise which could not be foreseen at time of shipment and over which the seller has no control; and that "On Board" bills of lading shall be delivered: Provided, however, that if the sale or contract of sale provides for or requires shipment by "Through Export Bills of Lading," shipment, in such case, shall be defined and construed, viz.: that the seeds sold shall be delivered to the initial carrier upon receipt of a Through Export Bill of Lading, as defined and authorized by the law and on Government regulations of the country of the seller or failing such governmental regulations, by a Through Export Bill of Lading as defined and authorized by the law merchant of the country of the seller.

(b) Agricultural seeds shipped under a sale or contract of sale shall be at time of shipment in a sound condition, and in bags or containers of sufficient strength to withstand all reasonable wear and tear of transportation, the burden of proof of establishing the aforesaid condition of the seeds and of the containers to be upon the seller.

(c) "IMMEDIATE SHIPMENT" shall be shipment within ten days, Sundays and legal holidays excepted, from date of sale or contract of sale.

(d) "PROMPT SHIPMENT" shall mean shipment from European, United States or Canadian seaport within twenty-one days from date of sale or contract of sale; and thirty days to or from Australia or other countries or regions not herein otherwise specified; (provided, however, that if sale or contract of sale calls for shipment by "Through Export Bills of Lading," "Prompt Shipment" and "Immediate Shipment" shall mean, in respect to shipments from any country or region the delivery of the merchandise to the initial transportation carriers within twenty-one days in "prompt shipment" and ten days in "immediate shipment" from date of sale or contract of sale.)

In the absence of any provision in the sale or contract of sale as to the time of shipment, PROMPT SHIPMENT shall be presumed.

(e) Shipment required by the terms of sale or contract of sale to be within a specified period of time shall be made within the extreme dates of such periods.

(f) Each shipment under a sale or contract of sale shall be considered as if it were a separate contract, and shall be governed by all the terms and conditions of the sale or contract of sale.

Force Majeure

Section 5—Should seller be prevented from delivering the agricultural seed sold under a sale or contract of sale by reason of riots, strikes, lockouts, embargoes, acts of God, or of Kings, Princes, Rulers or Peoples, or restraint by process of law, the time for delivery shall be extended, until the operation of the causes preventing delivery has ceased, PROVIDED, however, that the seller, in order to secure such extension of time of delivery, shall, within five days from the happening of the cause preventing said delivery, give notice thereof to the buyer by cable or telegram.

Commercial Documents

Section 6—The set of commercial documents herein referred to as Documents, to be presented to the buyer shall consist of the following:

(a) Full set of Bills of Lading duly endorsed. Said Bills of Lading shall provide that the carrier has received the merchandise in good order and condition, and delivery is to be made by the carrier in like good order and condition: PROVIDED, that if such Bills of Lading vary from the aforesaid conditions, or include other restrictive terms or conditions limiting the obligations of the carrier, the seller shall give to the buyer an insurance policy fully covering any or all of said reservations or limitations of carrier's liabilities.

(b) Policies of insurance, and for certificates of insurance. Said certificates to contain, or have attached thereto, a memorandum of all the terms and conditions of insurance PROVIDED, that all policies of insurance, whether in certificate form or otherwise, covering shipments of agricultural seeds to any country shall be made in those Insurance Companies which carry reserve deposits in the country of destination, or in London, with notice to the buyer as to where such reserve deposits are carried or held.

The insurance herein above required shall be for not less than ten per cent over invoice amount, and policies of insurance shall provide three per cent particular average covering each individual package.

(c) Copy for Invoice in duplicate.

(d) Consular Invoice (if necessary).

(e) Draft or Bill of Exchange, but such draft or bill of exchange shall not be presented to buyer unless and until the buyer shall have received for inspection shipping samples of the identical agricultural seeds covered

by the Commercial Documents, such draft or bill of exchange having said conditions clearly endorsed on said documents.

(f) Such other documents as the sale or contract of sale or the laws of the country of destination may require.

If the documents do not include the full set of Bills of Lading, at least one of the Bills of Lading should be negotiable and be duly endorsed.

Should the steamship carrying the shipment of seeds arrive before the documents, if the buyer takes delivery of the seeds by furnishing such evidence of identification, and guarantees for production of such documents as may be required by the ship owners or by the Customs authorities, and furthermore, if the buyer is unable or fails to take delivery as last aforesaid, all dues, costs, charges and expenses directly incurred in said transactions, or caused by such failure to tender the documents to the buyer on or before arrival of the seeds at destination, shall be paid by the seller.

Shipping Samples

Section 7—Six shipping samples, to be taken from a bulk sample which shall be drawn in equal quantities from each package of the shipment and duly sealed, such samples being truly representative of the bulk, shall be sent to the buyer, to be in his hands prior to the presentation and payment of the draft or bill of exchange. Two of such samples shall be held by the buyer without breaking the seals until arrival of the merchandise and full acceptance of same.

Noxious Weed Seeds

Section 8—(a) The Term "Absolutely Dodder Free," or Absolutely Free from any other noxious weed seed specified in the sale or contract of sale, shall require that no dodder, or such other specified noxious weed seed, shall be found in a test of 150 grams from a sample taken as is provided in Section 7 of these rules.

(b) If the buyer discovers the presence of dodder or such other noxious weed seed as may be specified in the sale or contract of sale in the shipping samples sent by the seller to the buyer, he may, within two days (Sundays and holidays excepted) after such discovery, by cable demand that the seller or his agent shall withhold, and the seller or his agent thereupon shall withhold the presentation of the drafts for payment until the arrival of the bulk of the identical shipments and until a reasonable opportunity shall have been given to the buyer to take a sample from the bulk of the shipment in the method provided in Section 7 of these RULES, and to make a 150-gram test of said sample for the presence of dodder or such other specified noxious weed seed.

(c) In the event of a dispute between the buyer and seller as to the presence of dodder or such other specified noxious weed seed in the aforesaid 150-gram test, a Government analyst in the country of the buyer shall make such a test of 150 grams from a sample drawn by him or his agent as provided in Section 7 of these RULES, and such official test shall be conclusive on the buyer and seller in respect to the presence of such dodder or other specified noxious weed seed. Until the determination of such official test the seller or his agent shall withhold presentation of the draft for payment.

(d) The term "DODDER FREE," or free of any other noxious weed seed specified in the sale or contract of sale shall require that there shall not be more than ten grains of dodder or such other specified noxious seed in one kilo of agricultural seed, and in the event of any dispute between the buyer and the seller as to

[Continued on Page 436]

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FIELD SEEDS

[Continued from page 435]

the presence of dodder or such noxious weed seed in the prescribed amount, a test by a government analyst as herein above provided for shall be made and be conclusive on the buyer and seller. Until the determination of such official test, the seller or his agent shall withhold presentment of the draft for payment.

(e) Immature dodder, incapable of growth, shall not be included in the aforesaid count for dodder, unless such exclusion is contrary to the law or governmental regulations of the country of the buyer.

Arbitration

Section 9.—Any dispute arising between the parties to a sale or contract of sale of agricultural seeds, if not settled promptly by said parties, or otherwise determined by these RULES, shall be submitted for arbitration and award to the ARBITRATION COMMITTEE of the Seed Trade Association of the buyer's country. PROVIDED, such Association has a duly constituted and acting ARBITRATION COMMITTEE governed by a procedure identical in form and substance as provided by the By-Laws and Arbitration Rules of the Wholesale Grass Seed Dealers' Association (of America), in effect as of July 8, 1924; and PROVIDED FURTHER, if there is no arbitration committee so organized and acting under such arbitration rules in the country of the buyer, the dispute shall be referred to

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the ARBITRATION COMMITTEE of a neutral country, but only if such committee is duly organized and acts in the manner aforesaid.

An appeal from the award of the ARBITRATION COMMITTEE having original jurisdiction may be taken by either party within two weeks from the receipt of the award to the Arbitration Committee of a neutral country provided that such Committee is organized and acts in the manner prescribed in the preceding paragraph. If there is no duly constituted and acting Arbitration Committee in a neutral country of which an appeal may be taken, the award of the Arbitration Committee having original jurisdiction shall be final and conclusive on both parties.

Uniform Sampling and Analyses

Section 10.—All methods of sampling and analyses or tests of agricultural seeds for the determination of purity, germination, weed seed contents, or in any other respect as to the quality of the agricultural seeds, by either the buyer or the seller, shall be made by those uniform or standard methods adopted or approved by the International Seed Testing Congress at Cambridge, England, in July, 1924, or, in the event that said Congress has not adopted such methods of sampling or analyses of agricultural seeds, the sampling and analyses required by the RULES shall be those adopted by the Association of Official Seed Analysts of North America, in so far as the aforesaid methods of sampling and analyses are not in conflict with these RULES.

SEEDS AN INTERNATIONAL CROP

The Hay, Feed and Seed Division of the Bureau of Agricultural Economics, United States Department of Agriculture, is having all its seed reports mimeographed for prompt distribution. Henry C. Taylor, chief of the Bureau, in his annual report just submitted stated that:

"The seed business is international, and information from the United States alone is not a reliable indicator of the trend of future seed prices for some kinds of seed. Seed production and demand in Europe and elsewhere may affect prices in the United States more than the size of our crop. To illustrate, the 1923 crop of Red Clover seed in the United States was only about half as large as the 1922 crop; nevertheless, prices in the spring of 1924 were only a little higher than during the previous year, due to the fact that Europe produced a large crop in 1923. For this reason it is highly necessary that information regarding European production and demand for seeds be made available to producers in the United States as soon as possible. In order that such information may be obtained one or more correspondents at leading markets were obtained by the representative of the bureau. These correspondents will submit monthly reports regarding seed crops and trade conditions in their countries, in return for which they will receive seed reports issued by this bureau."

NEW SEED TRADEMARK

The following new seed trademark was published in a recent issue of the *Official Gazette* of the United

GOLD

States Patent Office: "Gold" corn and seed grains. The Craver-Dickinson Seed Company, Buffalo, N. Y. Filed September 11, 1924. Serial No. 202,768.

A seed store has been opened at Omaha, Neb., by C. A. Ranny.

The Lilly Seed Company of Yakima, Wash., is now operating as the Yakima Seed Company.

The building of the Schisler-Cornell Seed Company of East St. Louis, Ill., is being remodeled.

Harry Boyd has resigned his position with the Albert Dickinson Seed Company of Chicago, Ill.

The Burns Seed Store has been opened for business at 300 W. Second Street, Davenport, Iowa.

The Utica Seed Company of Utica, N. Y., has bought a building at Utica and has plans for changes which will give the company a modern seed store.

Ground for a new warehouse has been bought by the J. Chas. McCullough Seed Company of Cincinnati, Ohio. The new building will be about eight stories high.

An office has been opened at Myton, Utah, for the buying season by the Western Seed Marketing Company of Salt Lake City, Utah. B. E. Sheehan will be in charge of the buying.

A new building has been completed at Kearney, N. J., for the Bonnie Best Seed Company, Inc., of Newark, N. J. The building has three floors and has 7,000 square feet floor space.

To grow and sell plants and seeds, the Meadowbrook Estates, Mt. Vernon, N. Y., was incorporated, capitalized at \$200,000. P. H. Girard, M. Girard and C. E. Hubbard are interested.

The farm implement, machinery and seed store of George W. Henry has been sold by him to Fred Krueger of Shelbyna, Mo. He took in part payment 95 acres of land near Shelbyna.

The Earle Seed Company has been incorporated at Gouverneur, N. Y., capitalized at \$25,000, with

headquarters at Brooklyn. Fred B. Fuller is president. The company was organized 22 years ago by C. Pliny Earle and conducted by him for 15 years ago. Mr. Fuller took over the business seven years ago.

The North Alabama Seed Company of Florence, Ala., has discontinued its branch store at Sheffield, and will concentrate its energies on its Florence establishment. W. L. Holland is president of the firm.

J. C. Eichenauer is now with the Phoenix Seed & Feed Company of Phoenix, Ariz. He was formerly manager of the Delta Seed & Feed Company of Yuma, Ariz. He is succeeded by James M. Johnston.

The articles of incorporation of the Jerome B. Rice Seed Company of Cambridge, N. Y., have been amended, changing capital to 60,000 shares of par value to stock without value, 40,000 preferred and 20,000 common.

COAL

SOME MINES WILL PROBABLY CLOSE

The number of Illinois coal mines in operation will be considerably decreased beginning April 1, 1925, according to reports made by the coal division of the Department of Commerce at Washington. It is predicted that there will be a general movement on and after February 1 toward the shutdown of every mine which does not fully justify itself.

Indiana mines which are in operation show for the state about 42 to 43 per cent potential working time with a sufficiency of labor and transportation facilities.

PA. ANTHRACITE TAX UPHELD

The United States Supreme Court on December 4 upheld the validity of the anthracite tax law in Pennsylvania. Chief Justice Taft suggested that the method of valuing the coal seemed reasonable. The case was brought into the court by Cranberry Creek and other coal companies in its attempt to invalidate the statute.

After the Supreme Court had held in a previous

case that the state could impose a tax upon anthracite coal mined and ready for shipment, the law was attacked by the companies on the grounds that it was levied upon the coal after it had entered interstate commerce and that it was not uniform, being higher in some instances than in others.

The state contended the ad valorem tax was assessed at the time the coal was mined, washed or screened and was ready for shipment. It pointed out that the law required the superintendent or other mine officer to ascertain daily the number of gross tons mined, to value the output and to assess the tax.

FREIGHT INCREASE CANCELLED

On November 20 the proposed new schedules increasing the west-bound freight rates, and reducing the east-bound rates on bituminous coal from West Virginia stations north of Belva on the Chesapeake & Ohio railroad were ordered canceled by the Interstate Commerce Commission. The commission held that the revision in the rates was not justified.

The proposed new schedules increasing the freight rates from Evansville, Ind., and nearby points to destinations on the Chicago & Eastern railway were suspended November 14 by the Interstate Commerce Commission from November 20 to March 20, 1925.

Koon & Sons have sold their grain elevator and retail coal business at Houston, Neb.

The Fletcher Grain Company of Fletcher, Okla., has installed a new scale and will conduct a retail coal business.

The grain elevator and coal business of G. D. Mabie at Gilbert, Iowa, has been bought by C. C. Buck of Iowa Falls.

The grain elevator and retail coal business of F. M. Webb at Joliet, Mont., have been sold to the Occident Elevator Company.

The grain elevator and retail coal business of the Walter Grain Company located at Riley, Kan., has been bought by W. S. Timmons.

The retail coal and grain business of Boyer & Heard at Hagerstown, Md., has been bought by Wm. A. Danzer. It includes the grain elevator and coal pocket and was sold for \$28,000.

A petition in bankruptcy has been filed by Elmer O. Billingslea, grain dealer, of Frederick, Okla. The firm's assets are \$41,054; liabilities, \$71,736.

GRAIN TRADE PATENTS

Bearing Date of November 11, 1924

Door for grain cars.—Richard Ebling, Eau Claire, Wis. Filed May 15, 1922. No. 1,515,558.

Bearing Date of November 18, 1924

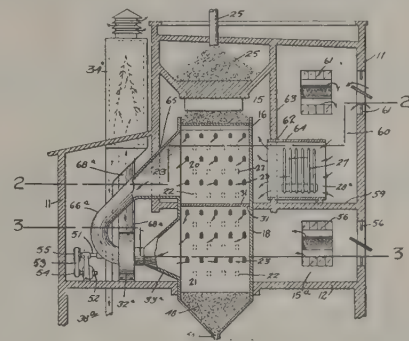
Grain door for box cars.—John Alexander O'Rourke, Carbon, Alta., Canada. Filed November 25, 1922. No. 1,515,964.

Roller conveyor.—George W. Curits, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a corporation of Ohio. Filed September 26, 1923. No. 1,516,083.

Grain separator and cleaner.—Henry K. Russow, Ellsworth, Minn. Filed May 24, 1921. No. 1,515,776.

Bearing Date of December 2, 1924

Grain drying and cooling apparatus.—Philip Little, Jr., Minneapolis, Minn., assignor to The Strong-Scott Manufacturing Company, Minneapolis, Minn., a corporation of Minnesota. Original application filed September 26, 1921. Divided and this application filed March 27, 1924. No. 1,517,788. See cut. Claim: The combination, in an apparatus of the



class described, with drying and cooling rooms, and a grain drier and cooler mounted therein, and having upper and lower air chambers, and vertical grain passages arranged between said chambers and said rooms, of means for circulating air through said rooms and chambers, and transversely through the grain in said grain passages, whereby dust will be removed from the passing grain, and means for conducting the dust-laden air to dust-collecting means.

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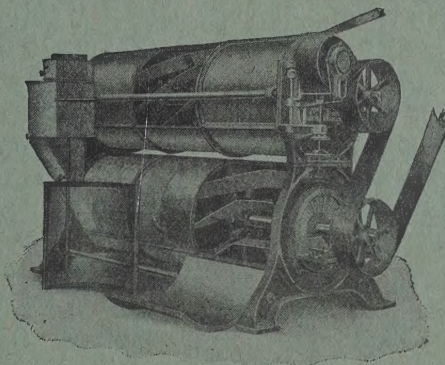
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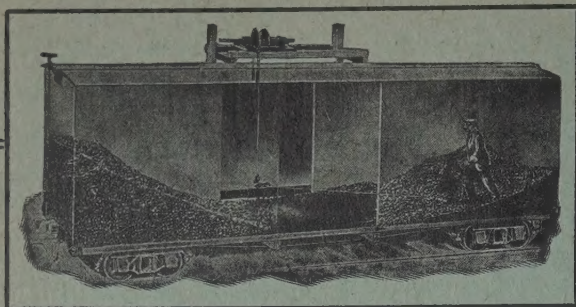
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